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Volume III

1

**THE POST-DAM SYSTEM
VOLUME III - DESQview 386
CONTROL PROGRAM**

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13. ABSTRACT (Maximum 200 words) Mission accomplishment in PACAF and USAFE depends on base recovery capability in a postattack environment. Base recovery includes identifying, analyzing, and repairing facility damage. For facilities critical to sortie generation, this process must be accomplished expediently. In a postattack environment, field information on facility damage is collected and analyzed to determine structural integrity and usability. From this analysis, a repair schedule is developed. This is currently a time consuming process that is shortened by using a computerized system. The scope of this effort was to develop a computerized postattack damage assessment system that recommends repair strategies, keeps inventory of materials and equipment, and schedules repairs based on manpower and equipment availability.				
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EXECUTIVE SUMMARY

A. OBJECTIVE

The objective of this report is to describe the software and hardware of the POST-DAM System, developed by Applied Research Associates, Inc., for airbase facility postattack damage assessment. This report contains descriptions of prototype software and hardware, and recommendations for full-scale development of both software and hardware.

B. BACKGROUND

In a postattack environment, field information on mission-critical facility damage is collected and analyzed to determine structural integrity and usability. From this analysis, a repair schedule is developed. This is a time-consuming process when done without the aid of a computerized system. Consequently, the POST-DAM System was developed to determine repair strategies with an expert system, keep track of materials and equipment with a relational database management system, and schedule repairs based on manpower and equipment availability with a project management system.

C. SCOPE

This technical report consists of nine volumes. Volume I describes software and hardware used with the prototype POST-DAM System, and recommends software and hardware for full-scale development. Volumes II through VIII are software user's manuals, which describe how to install and use the prototype software with the POST-DAM System. Volume IX is a field manual that contains diagrams of structures that are used with the POST-DAM system to locate damaged elements.

D. EVALUATION METHODOLOGY

The prototype POST-DAM System was developed using commercial, off-the-shelf (COTS) software and hardware. The system was constructed by integrating the software and hardware in such a way that a remote computer in the field can communicate with a host computer in the Base Civil Engineering (BCE) Damage Control Center (DCC). The POST-DAM system determines repair strategies, keeps track of materials and equipment, and schedules repairs based on manpower and equipment availability. This prototype system has been evaluated in-depth, and subsequent recommendations are made herein about software and hardware that should be used for full-scale development.

E. CONCLUSIONS

The prototype POST-DAM System is functional, but has limitations with respect to both hardware and software. The following problems were encountered:

1. The prototype remote computer is not portable, and cannot be used in the field. No satisfactory, hand-held remote terminal was available for this project.

2. The expert system cannot hold all the information required for full-scale development, because it cannot use extended memory.

3. Both the relational database management system and project management system require more human interaction than desired.

4. The communication system software is not compatible with the Survivable Base Recovery After Attack Communication System (SBCS) being developed for ESD by Sumaria Systems, Inc., with which the POST-DAM System is required to interface.

F. RECOMMENDATIONS

For full-scale development, the following features should be incorporated in the POST-DAM System.

1. Replace the prototype remote computer with a hand-held terminal unit having at least 2 Mb of random access memory, and which can run applications requiring 640 Kb of base memory.

2. Replace the prototype host computer with a system having at least 4 Mb of random access memory, IEEE 802.3 LAN ports, and able to support multi-tasking operations.

3. Replace the CLIPS expert system shell with an expert system shell capable of supporting applications at least twice as large as those developed for the prototype system.

4. Set the host computer up to interface with the IEEE 802.3 Ethernet local area network (LAN) used by SBCS.

5. Construct a single computer program to replace the relational database management system and the project management system, to minimize the required amount of human intervention. This system should be developed by personnel with a strong background in computer science.

PREFACE

This report was prepared by Applied Research Associates, Inc. (ARA), P.O. Box 40128, Tyndall Air Force Base, FL 32403, under Contract F08635-88-C-0067, for the Air Force Civil Engineering Support Agency, Tyndall Air Force Base, Florida.

This report (Volumes I through IX) summarizes work completed between 1 February 1989 and 1 March 1991. Lt. James Underwood (USN) was the HQ AFCESA/RACS Project Officer.

This report has been reviewed by the Public Affairs Office, and is releasable to the National Technical Information Service (NTIS). At NTIS it will be available to the public, including foreign nations.

This technical report has been reviewed and is approved for publication.



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SECTION I

INTRODUCTION

1.1 OBJECTIVE

The objective of this software user's manual (SUM) is to explain the procedures for using the DESQview 386 control program with the following POST-DAM System programs: POST-DAM Relational Data Base Management System (RDBMS), Harvard Project Manager (HPM) project management system, Crosstalk Mk.4 communication system, and TED 1.1 Text Editor.

1.2 BACKGROUND

DESQview 386 is a multitasking, multiwindowing control program for an 80386-based PC or PS/2 computer. DESQview 386 is menu-driven, and lets the user run several DOS programs simultaneously, switch between programs, run programs in the background, and transfer data between programs. DESQview 386 is a commercial software package distributed by Quarterdeck Office Systems.

1.3 APPROACH

DESQview 386 controls the POST-DAM Relational Data Base Management System (RDBMS), the Harvard Project Manager (HPM) project management system, the Crosstalk Mk.4 communication system, and the TED 1.1 Text Editor on the POST-DAM host computer.

In a postattack situation, the user turns on the host computer and activates DESQview. From DESQview, the user runs Crosstalk Mk.4, and waits to receive files from POST-DAM expert system (PDES) programs being run on remote computers in the field by Damage Assessment Teams (DATs). After receiving the files from the first damage assessment, the user runs POST-DAM RDBMS using DESQview, while Crosstalk Mk.4 runs in the background. Using POST-DAM RDBMS, the user processes the files transferred from the expert system, to determine whether the repairs required by mission-critical facilities are possible, based on material, equipment, and manpower availability. After a group of possible repairs to a facility has been determined, the user uses DESQview to run HPM to schedule the possible repairs, based on equipment and manpower availability. The user then runs TED 1.1 from DESQview to edit the final output, which lists all repairs and what they require in materials, equipment, and manpower, and also the start and finish times. TED 1.1 is also used to edit the final output when the repair strategy, material requirements, or equipment and manpower requirements have changed.

SECTION II
APPLICABLE DOCUMENTS

2.1 SETA CONTRACT

2.1.1 Postattack Damage Assessment of Facilities, Subtask 2.02, Air Force Engineering and Services Center, SETA Contract F08635-88-C-0067, December 1987.

2.1.2 Postattack Damage Assessment of Facilities, Subtask 2.02.1, Air Force Engineering and Services Center, SETA Contract F08635-88-C-0067, October 1988.

2.1.3 Postattack Damage Assessment of Facilities, Subtask 2.02.2, Air Force Engineering and Services Center, SETA Contract F08635-88-C-0067, February 1989.

2.2 POST-DAM SYSTEM USER'S MANUALS

2.2.1 The POST-DAM System, Volume 1, Introduction to the POST-DAM System, Applied Research Associates, Inc., Report to AFESC/RDCS, March 1991.

2.2.2 The POST-DAM System, Volume 2, Software User's Manual for the Expert System, Applied Research Associates, Inc., Report to AFESC/RDCS, February 1991.

2.2.3 The POST-DAM System, Volume 4, Software User's Manual for the Relational Data Base Management System, Applied Research Associates, Inc., Report to AFESC/RDCS, December 1990.

2.2.4 The POST-DAM System, Volume 5, Software User's Manual for the Harvard Project Manager, Applied Research Associates, Inc., Report to AFESC/RDCS, December 1990.

2.2.5 The POST-DAM System, Volume 6, Software User's Manual for Crosstalk Mk.4 on the Host Computer, Applied Research Associates, Inc., Report to AFESC/RDCS, December 1990.

2.2.6 The POST-DAM System, Volume 7, Software User's Manual for the TED 1.1 Text Editor, Applied Research Associates, Inc., December 1990.

2.2.7 The POST-DAM System, Volume 8, Software User's Manual for Crosstalk Mk.4 on the Remote Computer, Applied Research Associates, Inc., Report to AFESC/RDCS, March 1991.

2.2.8 The POST-DAM System, Volume 9, Field Manual of Mission-Critical Facilities for Use With the Prototype POST-DAM System, Applied Research Associates, Inc., Report to AFESC/RDCS, March 1991.

2.3 SOFTWARE USER'S MANUALS

2.3.1 DESQview User's Manual, Quarterdeck Office Systems, 1987.

2.3.2 DESQview 386 User's Manual, Quarterdeck Office Systems, 1989.

2.3.3 Quarterdeck Expanded Memory Manager 386 User's Manual, Quarterdeck Office Systems, 1989.

2.3.4 Quarterdeck Manifest User's Manual, Quarterdeck Office Systems, 1989.

2.3.5 DESQview 386 Version 2.3 Upgrade Booklet, Quarterdeck Office Systems, 1990.

SECTION III

INSTRUCTIONS FOR USE

3.1 INSTALLING DESQVIEW 386

3.1.1 System Configuration

The DESQview 386 system is designed to run on 386 IBM Personal System/2, 386 IBM PC compatible, or 80286 PC with add-in 386 boards. DESQview 386 runs with PC-DOS or MS-DOS Versions 2.0-4.01, requires a 5.25 inch floppy disk drive, a hard disk, and at least one megabyte of memory, with at least 1.5 megabytes recommended for multitasking. For more information about system requirements see Document 2.3.2.

3.1.2 Installing DESQview 386 Files

The DESQview 386 files are installed using an "install" program. To run the "install" program, the user places DESQview 386 Disk Number 1 into floppy drive A:, then types the following command from the root directory:

C:\>A:INSTALL [Enter]

The information shown in Figure 3.1 appears on the screen, and the user is prompted to press [Enter] to continue. The user presses [Enter], the owner information appears on the screen as shown in Figure 3.2, and the user is prompted to press [Enter] to continue. The user presses [Enter], the information shown in Figure 3.3 appears on the screen, and the user is prompted to press [Enter] to install all files. The user presses [Enter], and the information shown in Figure 3.4 appears on the screen. Here, the user must make sure the QEMM and Manifest programs are installed in the C:\QEMM subdirectory before pressing [Enter] to continue. If QEMM and Manifest are not in the C:\QEMM subdirectory, the user must press the [Esc] key to return to the previous menu. If QEMM and Manifest are in the C:\QEMM subdirectory, the user presses [Enter], and the information shown in Figure 3.5 appears on the screen. If the information is correct, the user presses [Enter] to continue, and the current settings for QEMM appear on the screen, as shown in Figure 3.6. If the settings are not the same as shown in Figure 3.6, the user presses the [N] key and then [Enter] to reset the settings to those shown in Figure 3.6. If the settings are correct, the user presses the [Y] key and then [Enter] to continue, and the information shown in Figure 3.7 appears on the screen. The user presses the [Y] key, the AUTOEXEC.BAT and CONFIG.SYS files are updated, and the information shown in Figure 3.8 appears on the screen. The user removes Disk Number 1 from the A: drive and inserts Disk Number 2, then presses [Enter]. The information shown in Figure 3.9 appears on the screen, and the user must make sure DESQview is installed in the C:\DV subdirectory before pressing [Enter] to continue. If the information is correct, the user presses [Enter] and the information shown in Figure 3.10 appears on the screen. If DESQview is not installed in the C:\DV subdirectory, the user must press the [Esc] key to return to the previous menu. If DESQview is in the C:\DV subdirectory, the user presses [Enter], and the information shown in Figure 3.11 appears on the screen, which shows the user the

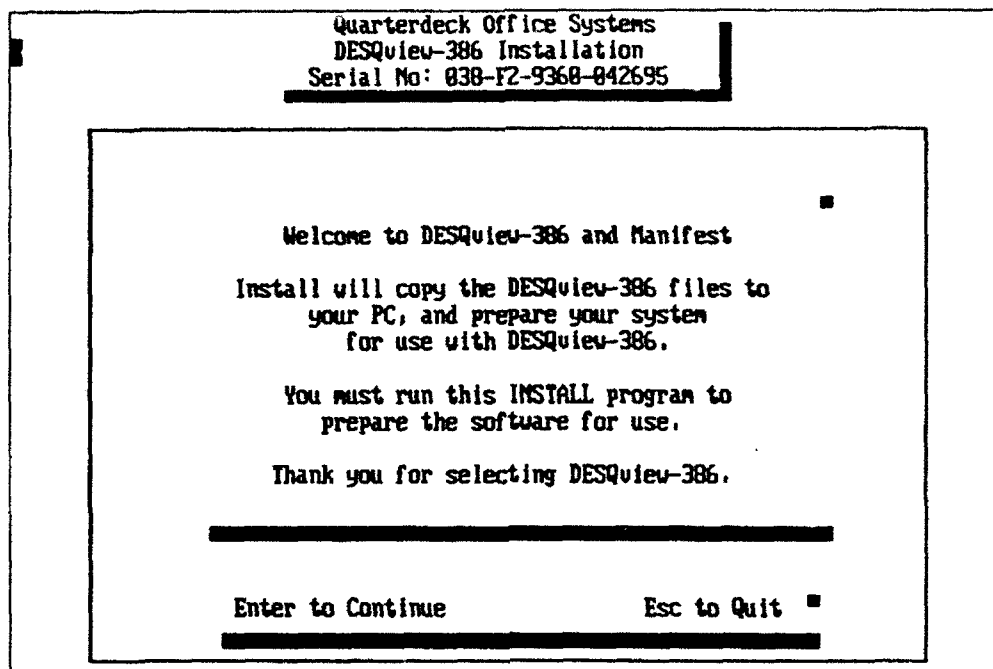


Figure 3.1. DESQview 386 Install Program Title Screen.

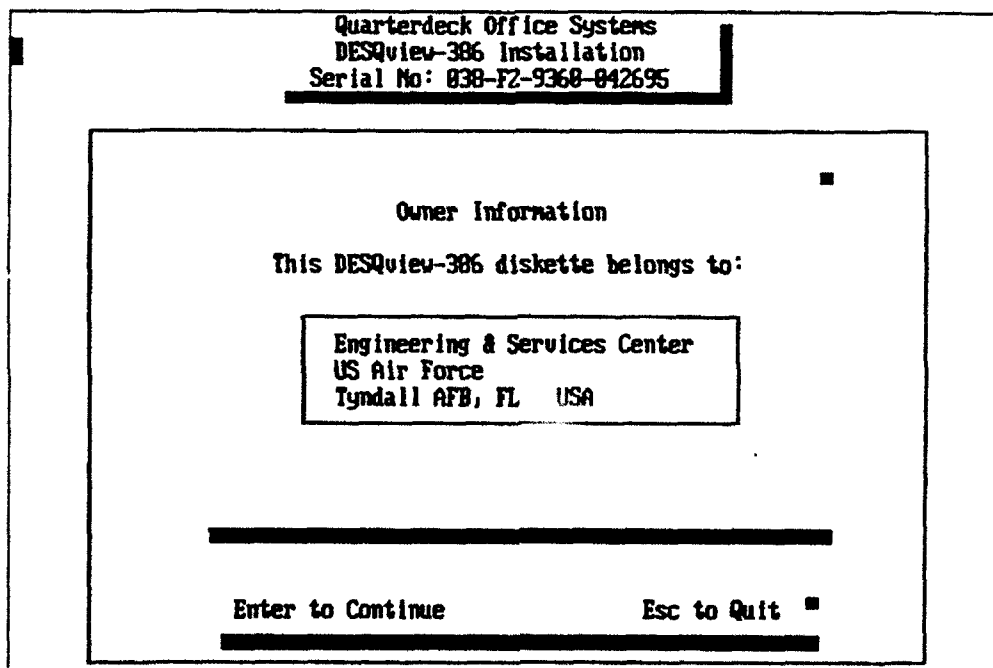


Figure 3.2. DESQview 386 Install Program Owner Information Screen.

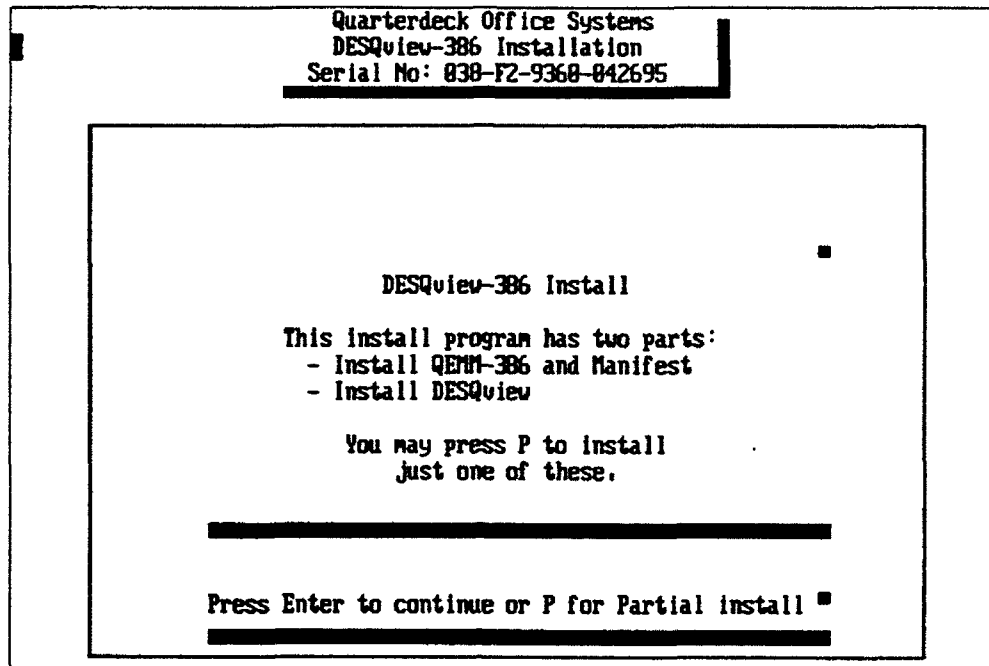


Figure 3.3. DESQview 386 Install Select Screen.

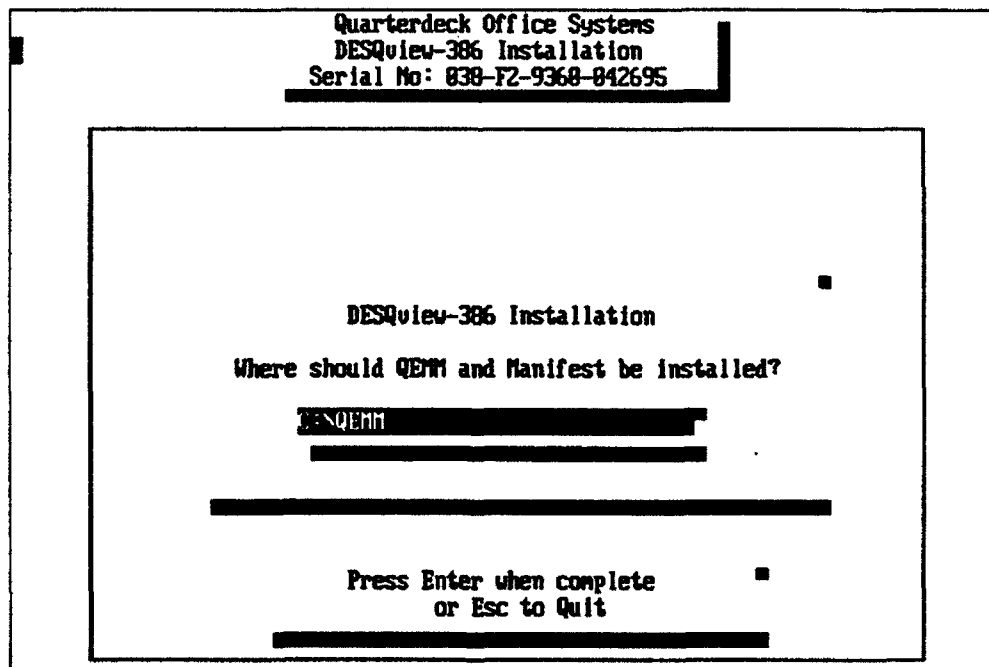


Figure 3.4. DESQview 386 QEMM Subdirectory Screen.

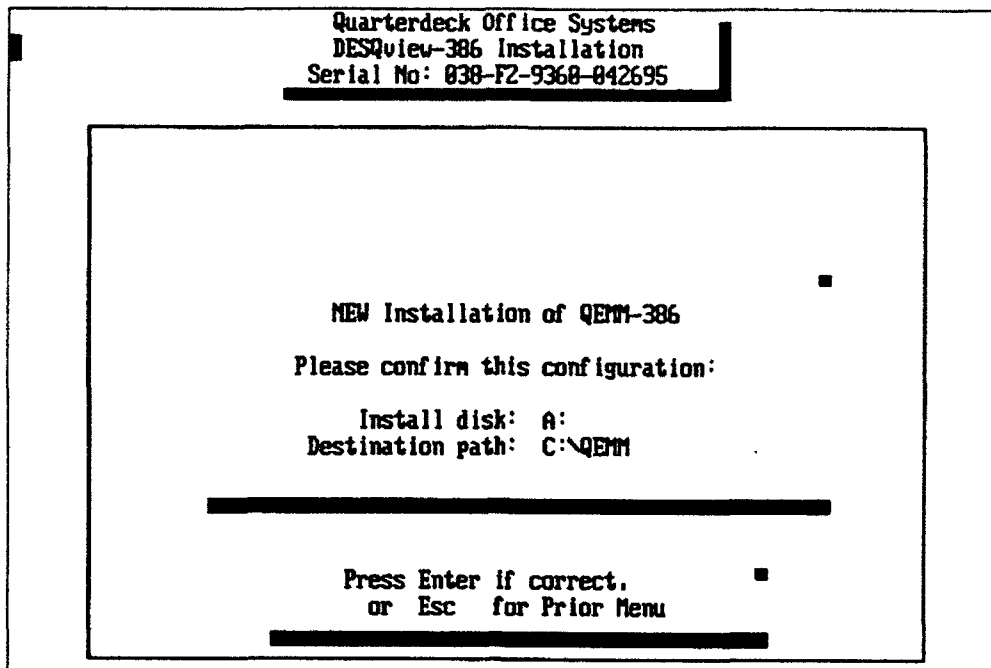


Figure 3.5. DESQview 386 QEMM Install Screen.

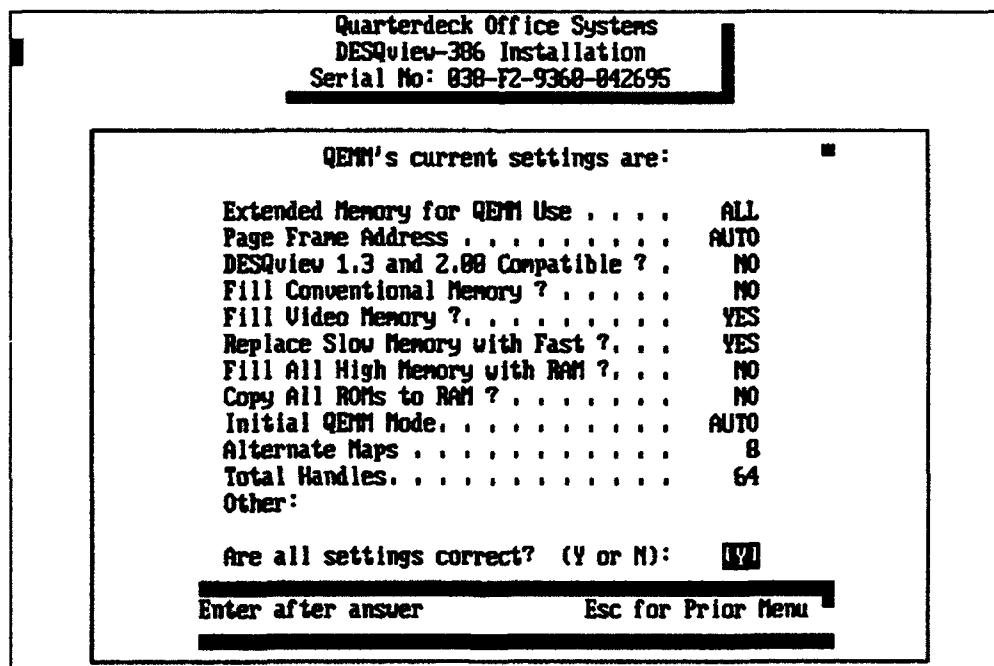


Figure 3.6. DESQview 386 Current QEMM Settings.

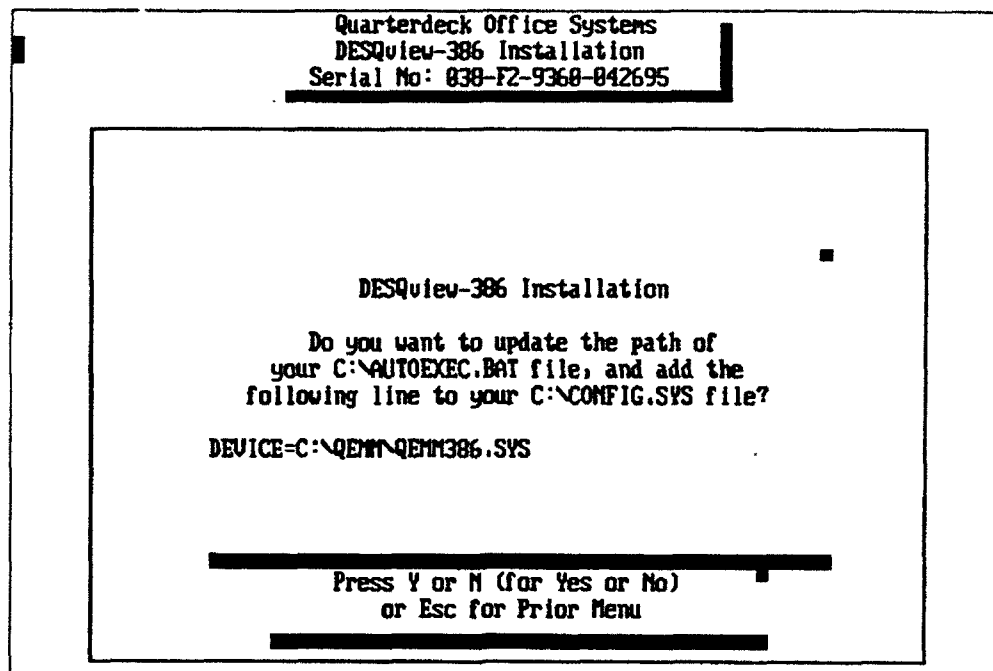


Figure 3.7. DESQview 386 File Update Screen.

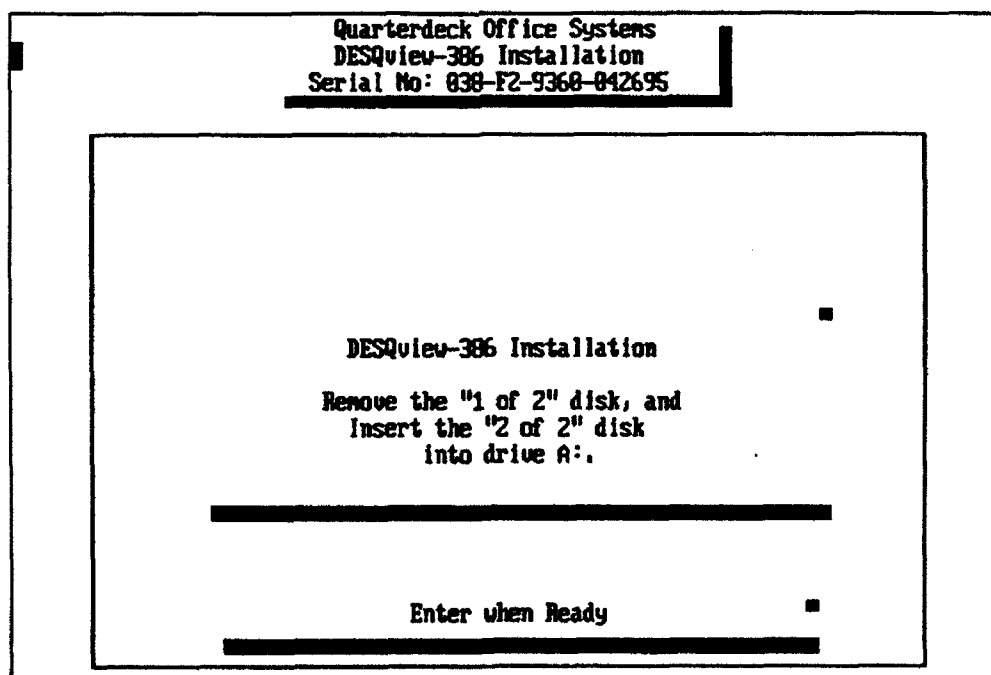


Figure 3.8. DESQview 386 Disk Change Screen.

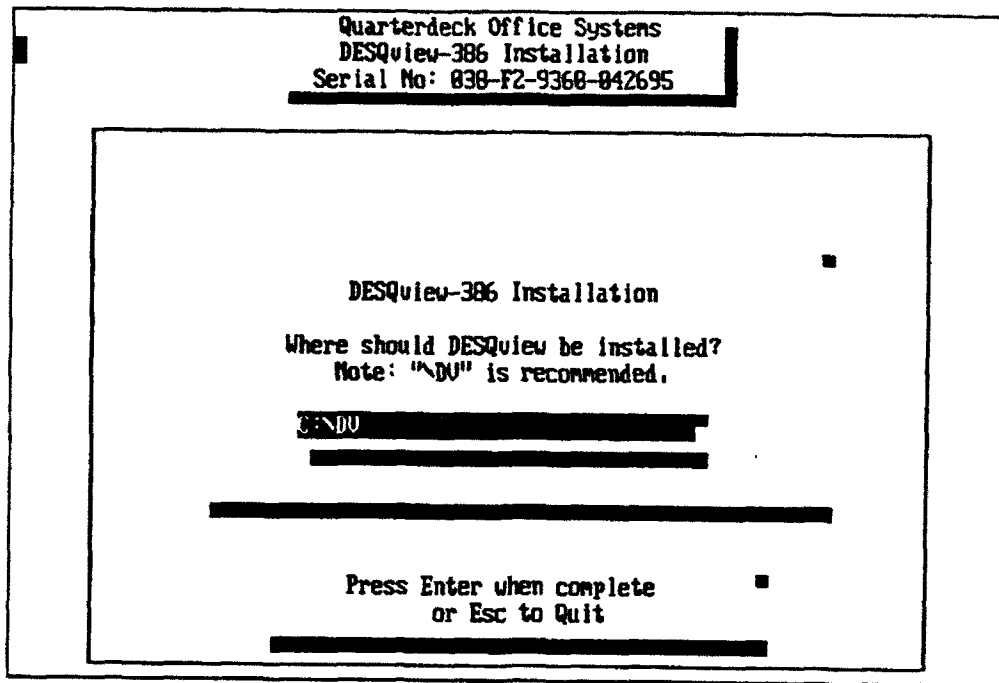


Figure 3.9. DESQview 386 DV Subdirectory Screen.

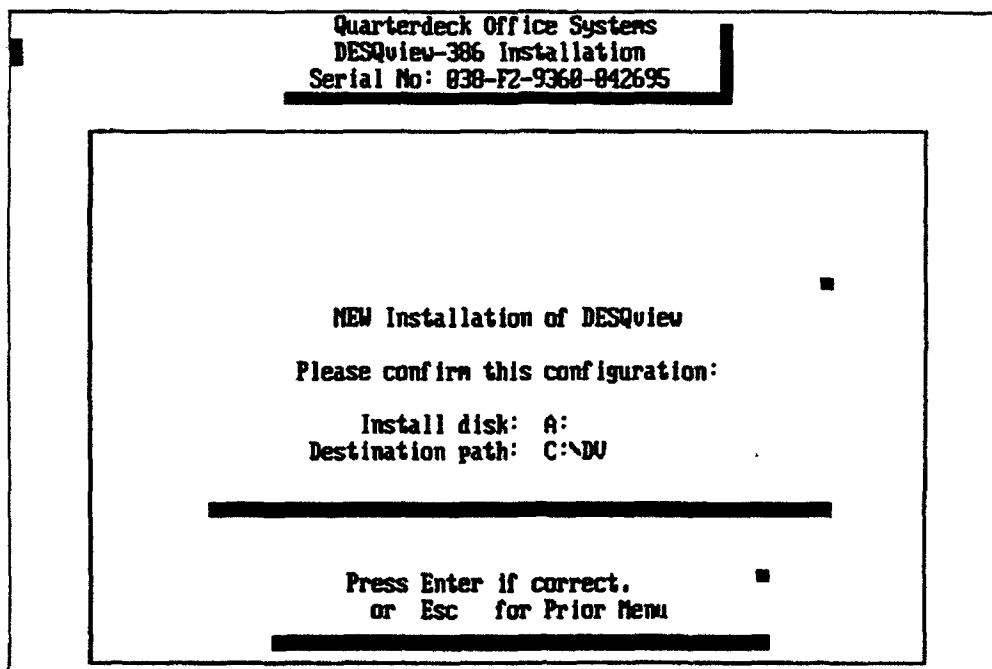


Figure 3.10. DESQview 386 DV Install Screen.

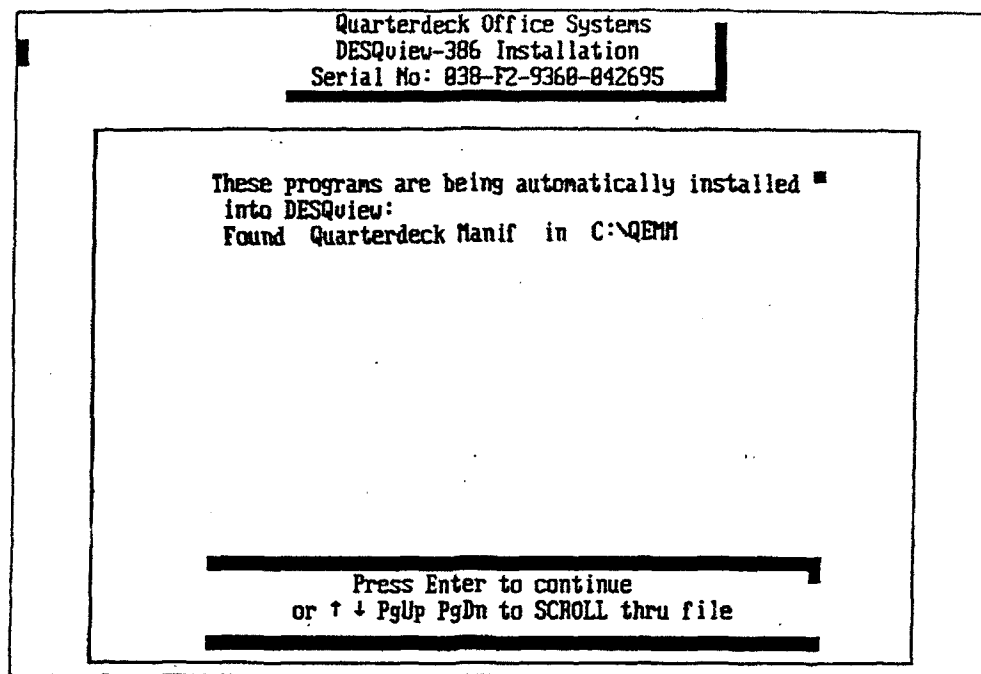


Figure 3.11. DESQview 386 Resident Program Install Program.

files that have been automatically installed. The user presses [Enter] to continue, and the information shown in Figure 3.12 appears on the screen, which states that DESQview 386 has been successfully installed, and prompts the user to view the READ.ME file by pressing the [Y] key, or to exit the install program by pressing the [N] key. After exiting the "install" program, the user must reboot the system. To do this, the user presses the [Ctrl], [Alt], and [Del] keys simultaneously, which resets the system to take advantage of the QEMM memory management program included in DESQview 386.

3.2 STARTING THE DESQVIEW 386 SYSTEM

DESQview 386 can be executed from any DOS prompt. After turning the computer on, the user types

C:\>DV [Enter]

at the root directory prompt. First the DESQview 386 title screen appears, as shown in Figure 3.13, and then the DESQview 386 Main Menu appears as shown in Figure 3.14.

3.3 SETTING UP THE DESQVIEW 386 SYSTEM

To setup DESQview 386 initially, the user must first install the POST-DAM Relational Data Base Management System (RDBMS), Harvard Project Manager (HPM),

Crosstalk Mk.4, and TED 1.1 in the host computer as described in Documents 2.2.3, 2.2.4, 2.2.5, and 2.2.6 respectively. Next, the user starts DESQview, and uses the arrow keys to place the cursor on "Open Window" in the main menu, as shown in Figure 3.14. The user then presses [Enter], which displays the Open Window menu as shown in Figure 3.15.

In the Open Window menu, the user places the cursor on "Add a Program," and presses [Enter], which displays the Add a Program menus shown in Figure 3.16. The user then presses the [O] key for Other, which displays the Add OTHER Program menu, as shown in Figure 3.17. At the OTHER Program menu, the user types the drive and directory where the program to be added is stored, then presses [Enter], which displays the Specify Program Information menu shown in Figure 3.18. The user types the program name, then, using the arrow keys, moves the cursor to the "Keys to Use on Open Menu Box" and types any two letter keys to start the program at the Open Menu. The user then uses the arrow keys to move the cursor to the program box, and types the drive, path and program to be run. The other Options in the Specify Program Information Menu are accessed by the arrow keys. They are program-dependent, and will be discussed as they are used. The user accesses the advanced options by pressing the [F1] key, which displays the Specify Program Information Advanced Options menu shown in Figure 3.19. The advanced options are also program-dependent, and will be discussed as they are used. After setting the advanced options, the user presses [Enter], and is prompted to add more programs by pressing the [A] key, or to press [Enter] to return to the main menu, as shown in Figure 3.20.

3.3.1 Setting Up the POST-DAM RDBMS

Following the method described in Section 3.3 of this SUM, the user goes to the Add OTHER Program menu, as shown in Figure 3.17, and types the directory and drive c:\pdam. Next, the user fills in the Specify Program Information menu, so the settings are the same as those shown in Figure 3.21. Then pressing the [F1] key, the user sets the advanced options so they match the settings shown in Figure 3.22. After the advanced options are set, the user presses [Enter], and is prompted to add more programs by pressing the [A] key, or to press [Enter] to return to the main menu, as shown in Figure 3.20.

3.3.2 Setting Up the Harvard Project Manager

Following the method described in Section 3.3 of this SUM, the user goes to the Add OTHER Program Menu, as shown in Figure 3.17, and types the directory and drive c:\hpm. Next, the user fills in the Specify Program Information Menu so the settings are the same as those shown in Figure 3.23. By pressing the [F1] key, the user sets the advanced options so they match the settings shown in Figure 3.24. After the advanced options are set, the user presses [Enter], and is prompted to add more programs by pressing the [A] key, or to press [Enter] to return to the main menu, as shown in Figure 3.20.

3.3.3 Setting Up Crosstalk Mk.4

Following the method described in Section 3.3 of this SUM, the user goes to the Add OTHER Program menu, as shown in Figure 3.17, and types the directory and drive c:\xtalk4. Next, the user fills in the Specify Program Information

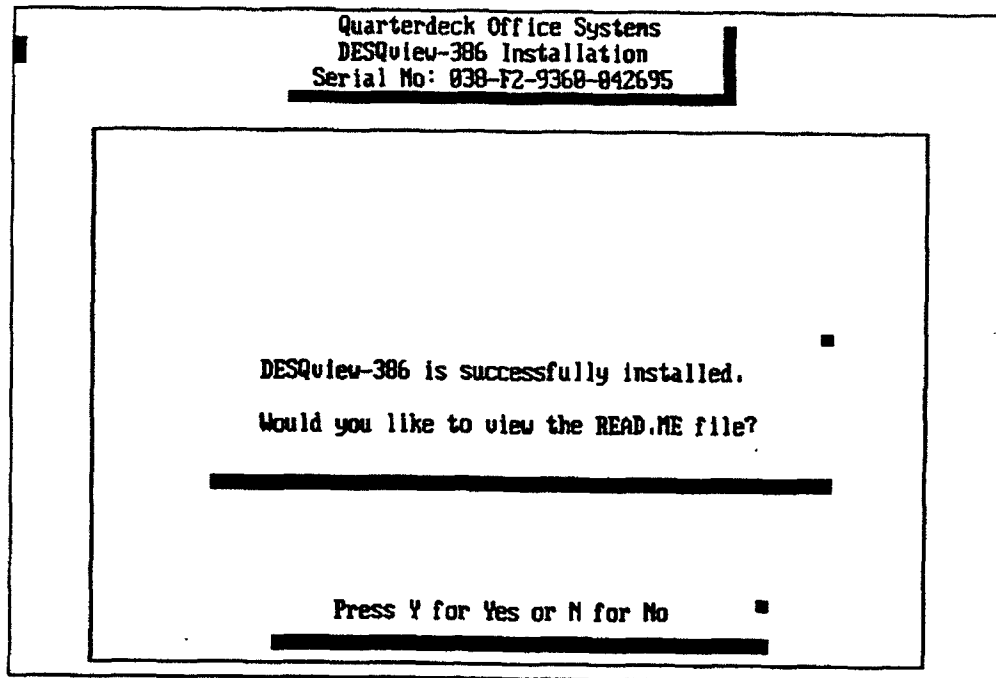


Figure 3.12. DESQview 386 READ.ME File Screen.

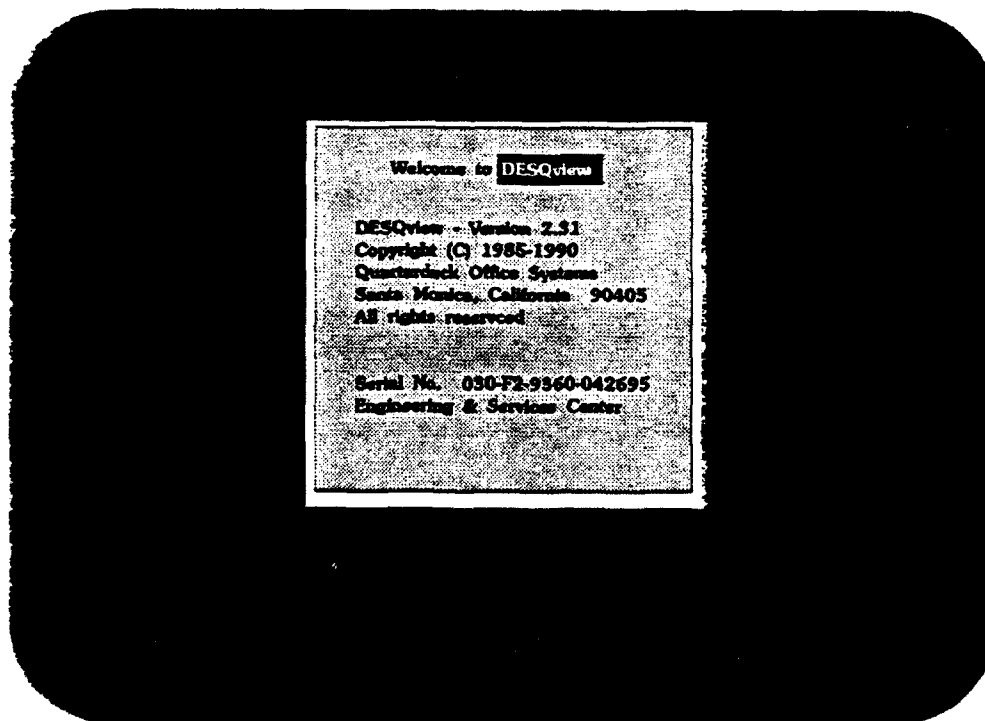


Figure 3.13. DESQview 386 Title Screen.

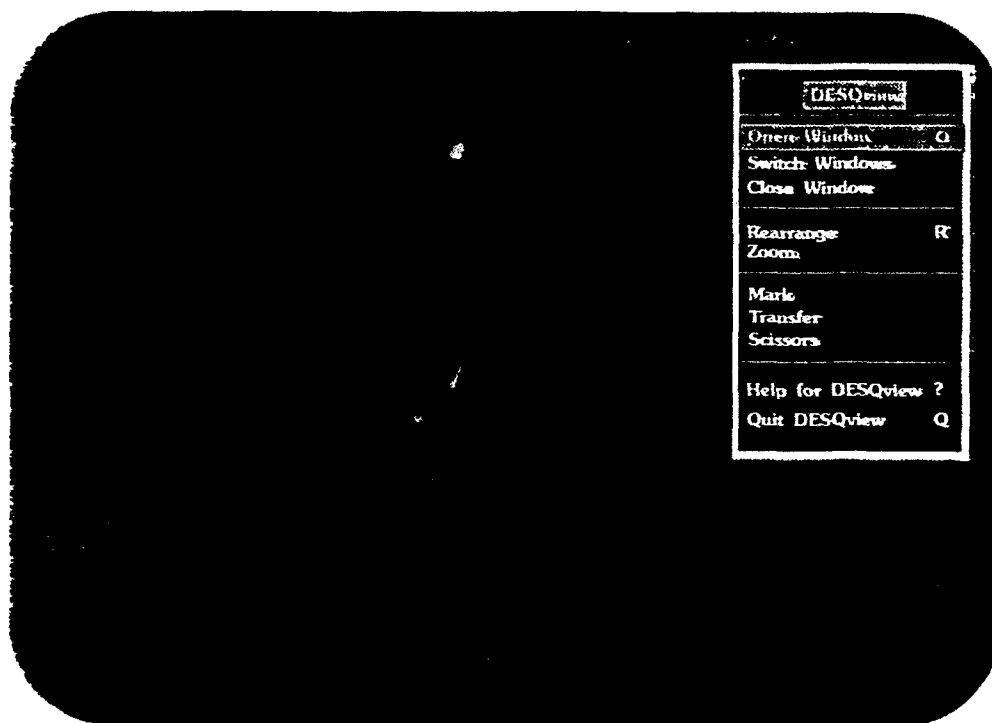


Figure 3.14. DESQview 386 Main Menu.

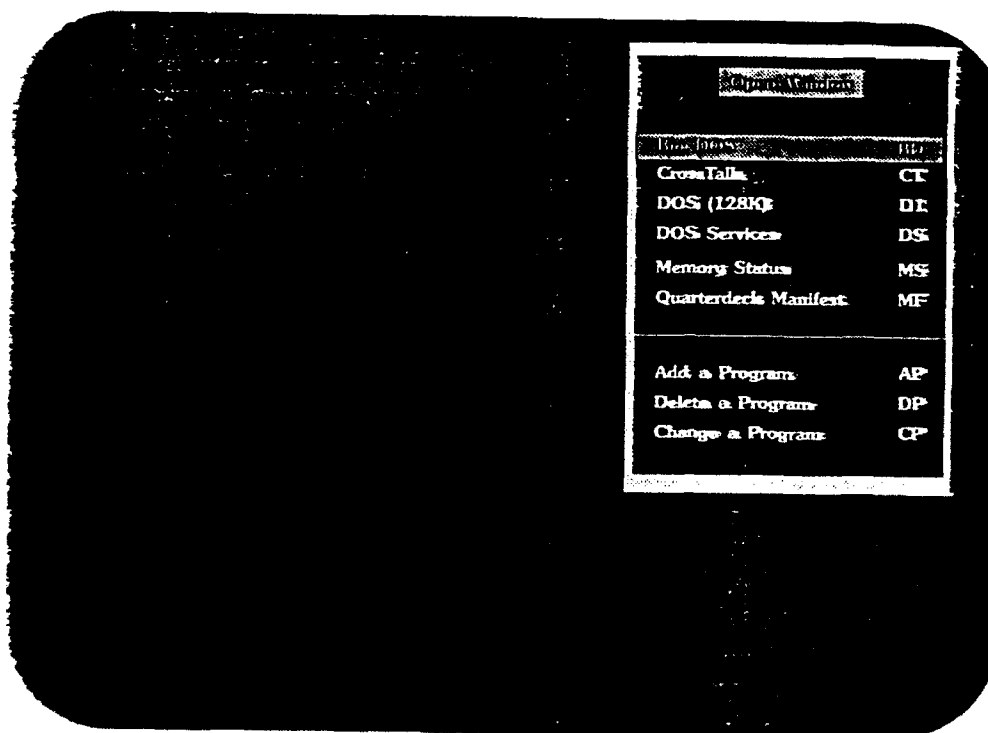


Figure 3.15. Open Window Menu.

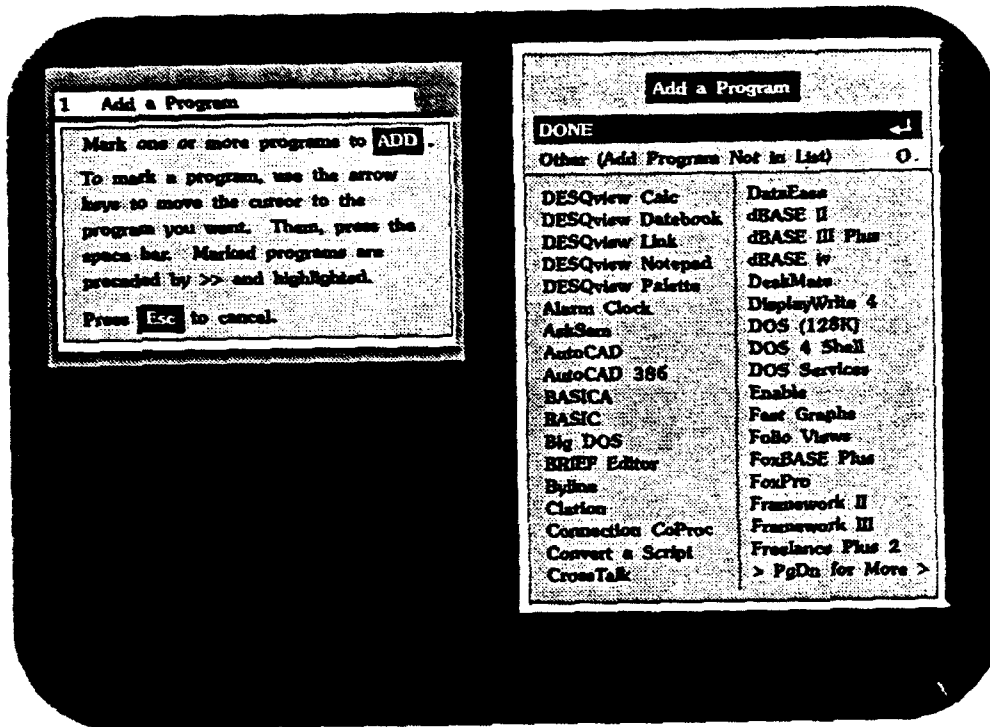


Figure 3.16. Add A Program Menus.

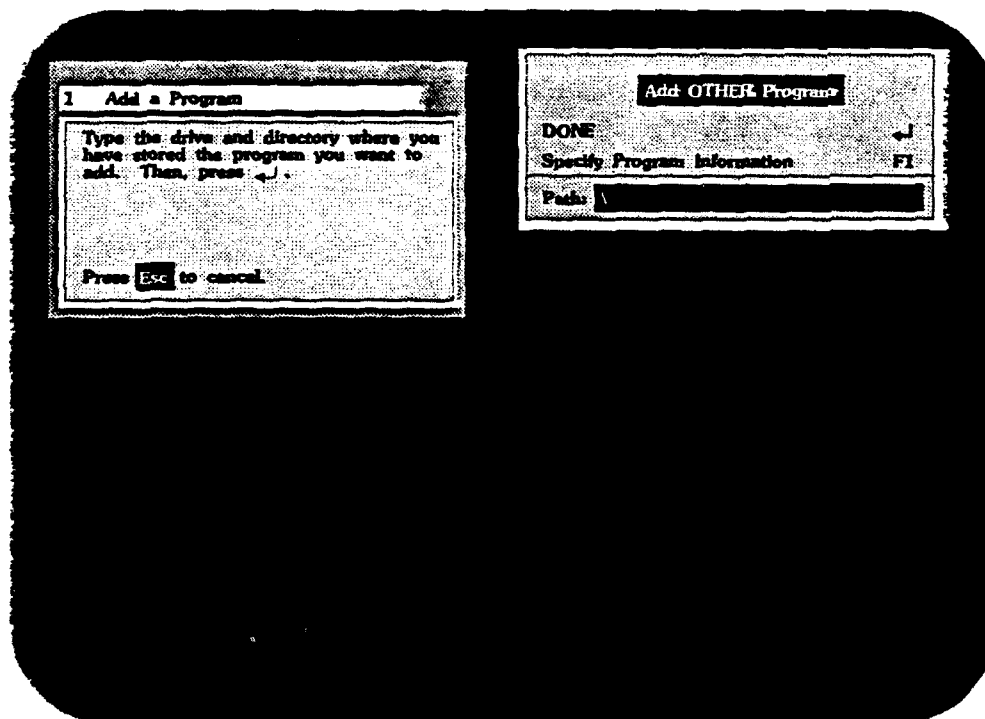


Figure 3.17. Add OTHER Program Menu.

Add a Program

Specify Program Information

Program Name.....:

Keys to Use on Open Menu.....: Memory Size (in K):

Program.....:

Parameters:

Directory.....:

Options:

Writes text directly to screen.....: ☐ (Y)

Displays graphics information.....: ☐ (N)

Virtualize text/graphics (Y,N,T).....: ☐ (Y)

Uses serial ports (Y,N,1,2).....: ☐ (N)

Requires floppy disks.....: ☐ (N)

Press F1 for advanced options

Press ← when you are DONE

Figure 3.18. Specify Program Information Menu.

Add a Program

Specify Program Information Advanced Options

System Memory (in K).....: Maximum Program Memory Size (in K).....:

Script Buffer Size.....: Maximum Expanded Memory Size (in K).....:

Text Pages: Graphics Pages: Initial Mode: Interrupts: to

Window Position:

Maximum Height: Starting Height: Starting Row.....:

Maximum Width: Starting Width: Starting Column:

Shared Program

Pathname:

Data.....:

Close on exit (Y,N,blank).....: ☐ (Y)

Allow Close Window command.....: ☐ (N)

Uses math coprocessor.....: ☐ (Y)

Share CPU when foreground.....: ☐ (Y)

Can be swapped out (Y,N,blank).....: ☐ (Y)

Uses its own colors.....: ☐ (Y)

Runs in background (Y,N,blank).....: ☐ (Y)

Keyboard conflict (0-F).....:

Share EGA when foreground/zoomed: ☐ (Y)

Protection level (0-3).....:

Press F1 for advanced options

Press ← when you are DONE

Figure 3.19. Specify Program Information Advanced Options Menu.

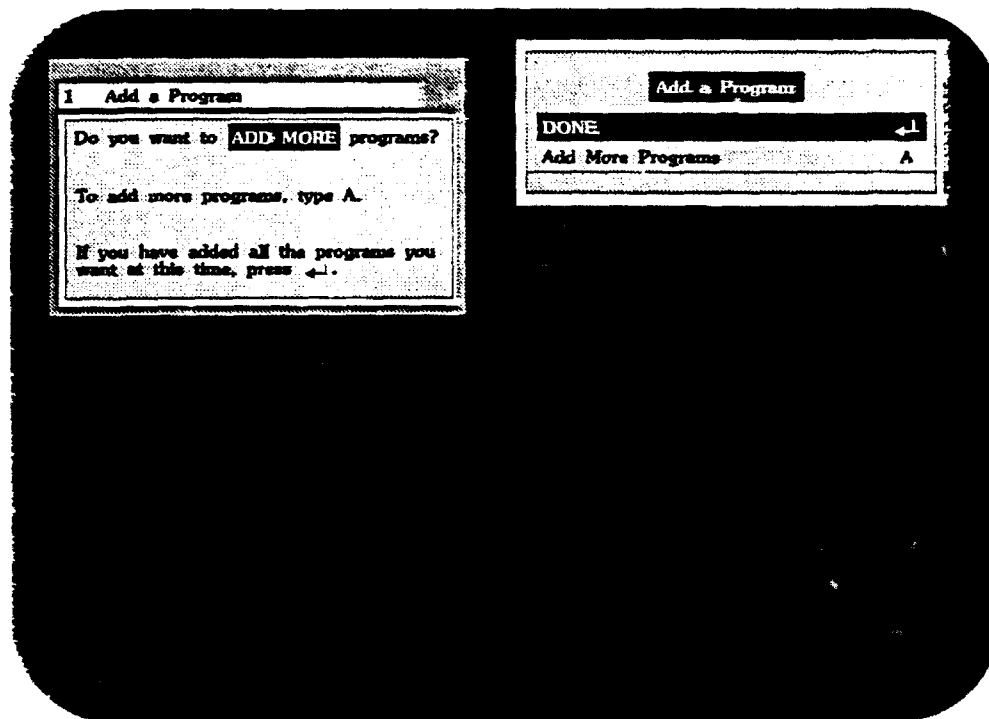


Figure 3.20. Add More Programs Menus.

Add a Program

Specify Program Information:

Program Name..... **POST-DAM RDBMS**

Keys to Use on Open Menu.... **RD** Memory Size (in K): **500**

Program.... **C:\PDAM\Pddb.bat**

Parameters:

Directory.... **C:\PDAM**

Options:

Writes text directly to screen..... **[N]**

Displays graphics information..... **[N]**

Virtualize text/graphics (Y,N,T).... **[Y]**

Uses serial ports (Y,N,1,2)..... **[N]**

Requires floppy disks..... **[N]**

Press <1> for advanced options. Press <1> when you are DONE.

Figure 21. Specify Program Information Menu for the POST-DAM RDBMS.

Add a Program

Specify Program Information Advanced Options

System Memory (in K): Maximum Program Memory Size (in K):
 Script Buffer Size: Maximum Expanded Memory Size (in K):
 Text Pages: Graphics Pages: Initial Mode: Interrupt: to

Window Position:

Maximum Height: Starting Height: Starting Row:
 Maximum Width: Starting Width: Starting Column:

Shared Program

Pathname:
 Data:

Close on exit (Y,N,blank): Uses its own colors:
 Allow Close Window command: Runs in background (Y,N,blank):
 Uses math coprocessor: Keyboard conflict (0-F):
 Share CPU when foreground: Share EGA when foreground/zoomed:
 Can be swapped out (Y,N,blank): Protection level (0-3):

Press **F1** for advanced options Press **←** when you are DONE

Figure 3.22. Specify Program Information Advanced Options Menu for the POST-DAM RDBMS.

Add a Program

Specify Program Information

Program Name:
 Keys to Use on Open Menu: Memory Size (in K):
 Program:
 Parameters:
 Directory:

Options:

Writes text directly to screen:
 Displays graphics information:
 Virtualize text/graphics (Y,N,T):
 Uses serial ports (Y,N,1,2):
 Requires floppy diskette:

Press **F1** for advanced options Press **←** when you are DONE

Figure 3.23. Specify Program Information Menu for the Harvard Project Manager.

Specify Program Information Advanced Options

System Memory (in K).....	<input type="text" value="0"/>	Maximum Program Memory Size (in K)...	<input type="text" value="512"/>
Script Buffer Size.....	<input type="text" value="1000"/>	Maximum Expanded Memory Size (in K)...	<input type="text" value="0"/>
Text Pages:	<input type="text" value="1"/>	Graphics Pages:	<input type="text" value="0"/>
Initial Mode:	<input type="text" value=""/>	Interrupts:	<input type="text" value="00"/> to <input type="text" value="FF"/>

Window Position:

Maximum Height:	<input type="text" value="25"/>	Starting Height:	<input type="text" value=""/>	Starting Row.....	<input type="text" value=""/>
Maximum Width..:	<input type="text" value="80"/>	Starting Width..:	<input type="text" value=""/>	Starting Column:	<input type="text" value=""/>

Shared Program

Pathname:

Data.....:

Close on exit (Y,N,blank).....:	<input type="text" value="N"/>	Uses its own colors.....:	<input type="text" value="N"/>
Allow Close Window command.....:	<input type="text" value="N"/>	Runs in background (Y,N,blank).....:	<input type="text" value="N"/>
Uses math coprocessor.....:	<input type="text" value="N"/>	Keyboard conflict (0-F).....:	<input type="text" value="0"/>
Share CPU when foreground.....:	<input type="text" value="N"/>	Share EGA when foreground/zoomed:	<input type="text" value="N"/>
Can be swapped out (Y,N,blank).....:	<input type="text" value="N"/>	Protection level (0-3).....:	<input type="text" value="0"/>

Press F1 for advanced options Press ← when you are DONE

Figure 3.24. Specify Program Information Advanced Options Menu for the Harvard Project Manager.

Menu, so the settings are the same as those shown in Figure 3.25. By pressing the [F1] key, the user sets the advanced options so they match the settings shown in Figure 3.26. After the advanced options are set, the user presses [Enter], and is prompted to add more by pressing the [A] key, or to press [Enter] to return to the main menu, as shown in Figure 3.20.

3.3.4 Setting Up TED 1.1

Following the method described in Section 3.3 of this SUM, the user goes to the Add OTHER Program Menu, as shown in Figure 3.17, and types the directory and drive c:\pdam. Next, the user fills in the Specify Program Information Menu, so the settings are the same as those shown in Figure 3.27. By pressing the [F1] key, the user sets the advanced options so they match the settings shown in Figure 3.28. After the advanced options are set, the user presses [Enter], and is prompted to add more programs by pressing the [A] key, or to press [Enter] to return to the main menu, as shown in Figure 3.20.

3.4 USING DESQVIEW 386

This section of the SUM tells how to use DESQview 386 to control the POST-DAM Relational Data Base Management System (RDBMS), the Harvard Project Manager (HPM) project management system, the Crosstalk Mk.4 communication system, and the TED 1.1 text editor.

Add a Program

Specify Program Information

Program Name.....: **CrossTalk**

Keys to Use on Open Menu....: **CT** Memory Size (in K): **300**

Program....: **C:\xtalk4\xtalk.exe**

Parameters:

Directory...: **C:\xtalk4**

Options:

Writes text directly to screen.....: **[N]**

Displays graphics information.....: **[N]**

Virtualize text/graphics (Y,N,T).....: **[Y]**

Uses serial ports (Y,N,1,2).....: **[Y]**

Requires floppy diskette.....: **[N]**

Press F1 for advanced options Press ← when you are DONE

Figure 3.25. Specify Program Information Menu for Crosstalk Mk.4.

Add a Program

Specify Program Information: Advanced Options

System Memory (in K).....: **0** Maximum Program Memory Size (in K)....: **540**

Script Buffer Size.....: **1000** Maximum Expanded Memory Size (in K)....: **0**

Text Pages: **1** Graphics Pages: **0** Initial Mode: Interrupts: **00** to **FF**

Window Position:

Maximum Height: **25** Starting Height: Starting Row.....:

Maximum Width...: **80** Starting Width...: Starting Column:

Shared Program

Pathname:

Date.....:

Close on exit (Y,N,blank).....: **[]** Uses its own colors.....: **[Y]**

Allow Close Window command.....: **[Y]** Runs in background (Y,N,blank).....: **[Y]**

Uses math coprocessor.....: **[Y]** Keyboard conflict (0-F).....: **[0]**

Share CPU when foreground.....: **[Y]** Share EGA when foreground/zoomed: **[Y]**

Can be swapped out (Y,N,blank)....: **[]** Protection level (0-3).....: **[0]**

Press F1 for advanced options Press ← when you are DONE

Figure 3.26. Specify Program Information Advanced Options Menu for Crosstalk Mk.4.

Specify Program Information

Program Name..... **Editor**

Keys to Use on Open Menu..... **ED** Memory Size (in K): **200**

Program..... **C:\Pdam\pded.exe**

Parameters:

Directory...: **C:\pdam**

Options:

Writes text directly to screen.....	[N]
Displays graphics information.....	[N]
Virtualize text/graphics (Y,N,T).....	[Y]
Uses serial ports (Y,N,1,2).....	[N]
Requires floppy diskette.....	[N]

Press F1 for advanced options Press ← when you are DONE

Figure 3.27. Specify Program Information Menu for TED 1.1.

Specify Program Information Advanced Option

System Memory (in K)..... **0** Maximum Program Memory Size (in K)..... **500**

Script Buffer Size..... **1000** Maximum Expanded Memory Size (in K)..... **0**

Text Pages: **1** Graphics Pages: **0** Initial Mode: Interrupts: **00** to **FF**

Window Position:

Maximum Height: 20	Starting Height: 	Starting Row.....
Maximum Width...: 80	Starting Width...: 	Starting Column:

Shared Program

Pathname:

Data.....:

Close on exit (Y,N,blank).....	[Y]	Uses its own colors.....	[N]
Allow Close Window command.....	[Y]	Runs in background (Y,N,blank).....	[Y]
Uses math coprocessor.....	[Y]	Keyboard conflict (0-F).....	[0]
Share CPU when foreground.....	[Y]	Share EGA when foreground/zoomed:	[Y]
Can be swapped out (Y,N,blank).....	[Y]	Protection level (0-3).....	[0]

Press F1 for advanced options Press ← when you are DONE

Figure 3.28. Specify Program Information Advanced Options Menu for TED 1.1.

The user begins by turning on the host computer and activating DESQview, as described in Section 3.2 of this SUM. Next, using the arrow keys, the user places the cursor on "Open Window" in the main menu, as shown in Figure 3.14. The user then presses [Enter], which displays the Open Window Menu shown in Figure 3.29. At the Open Window Menu, the user selects Crosstalk, which displays the Crosstalk Mk.4 Dialing Directory shown in Figure 3.30. To enlarge the screen, the user presses the [Alt] key, which displays the main menu in Figure 3.31. Here, the user selects the Zoom option, which enlarges the screen as shown in Figure 3.32. With the screen enlarged, the user sets the Crosstalk Mk.4 communication program to automatically receive files from the PDES, as described in Section 3.3 of Document 2.2.5.

After setting the communication system to receive files, the user presses the [Alt] key, and the main menu appears as shown in Figure 3.33. The user selects the Open Window Option, and the Open Window Menu appears as shown in Figure 3.34. From here, the user selects the POST-DAM RDBMS option, and the POST-DAM RDBMS window appears, as shown in Figure 3.35. From the RDBMS window, the user presses the [Alt] key, and the main menu appears, as shown in Figure 3.36. Here, the user then selects the Zoom option, which enlarges the screen, as shown in Figure 3.37. With the screen enlarged, the user evaluates the data from the POST-DAM Expert System, as described in Section 3.4 of Document 2.2.3.

While using the POST-DAM RDBMS, if a change is made to a repair strategy, material requirement, equipment or manpower requirement, or a facility is declared to be beyond expedient repair, or a repair is declared not possible, the user must use the TED 1.1 Text Editor to modify the corresponding repair strategy file. To start TED 1.1, the user presses the [Alt] key, which displays the DESQview Main Menu, as shown in Figure 3.38. The user selects the Open Window Option, which displays the Open Window Menu, as shown in Figure 3.39. From here, the user selects the Editor Option, and the Editor prompt appears in the window, as shown in Figure 3.40. From the Editor Window, the user presses the [Alt] key, and the main menu appears, as shown in Figure 3.41. Here, the user selects the Zoom option, which enlarges the screen, as shown in Figure 3.42. With the screen enlarged, the user selects the repair strategy file to be edited, and edits the file as described in Section 3.3 of Document 2.2.6. After editing the file the user saves it, and is returned to the POST-DAM RDBMS window.

After defining a group of possible repairs for a facility, using POST-DAM RDBMS, the user must schedule the repairs based on equipment and manpower availability, using Harvard Project Manager (HPM). To start HPM, the user presses the [Alt] key, which displays the DESQview Main Menu, as shown in Figure 3.38. Here, the user selects the Open Window Option, which displays the Open Window Menu, as shown in Figure 3.43. The user then selects the HPM option, and the HPM Main Menu appears in the window, as shown in Figure 3.44. From the HPM window, the user presses the [Alt] key, and the main menu appears, as shown in Figure 3.45. Here, the user selects the Zoom Option, which enlarges the screen, as shown in Figure 3.46. With the screen enlarged, the user schedules the repairs as described in Section 3.3 of Document 2.2.4.

After the repairs for a facility have been scheduled using HPM, the user must use the TED 1.1 Text Editor to modify the corresponding repair strategy file. To start TED 1.1, the user presses the [Alt] key, which displays the

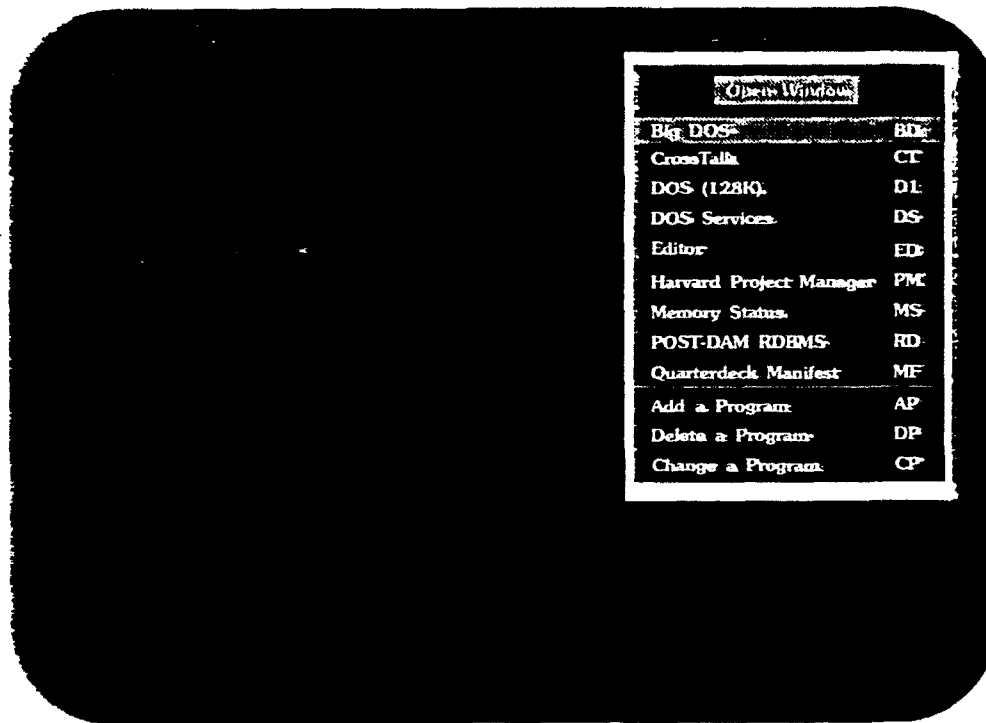


Figure 3.29. Open Window Menu.

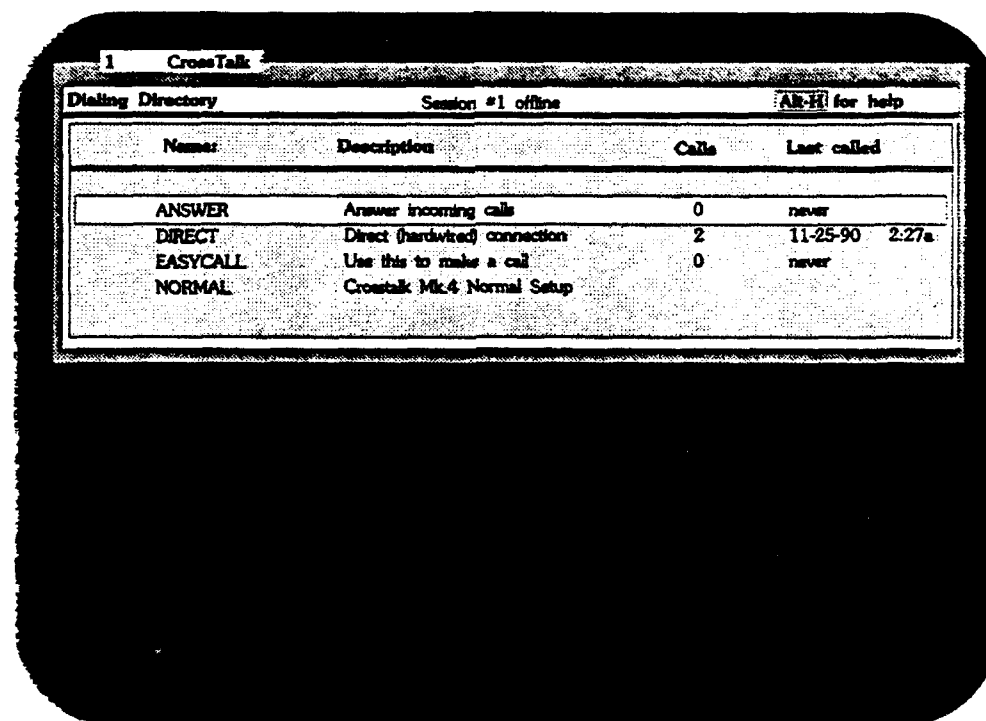


Figure 3.30. Crosstalk Dialing Directory Window.

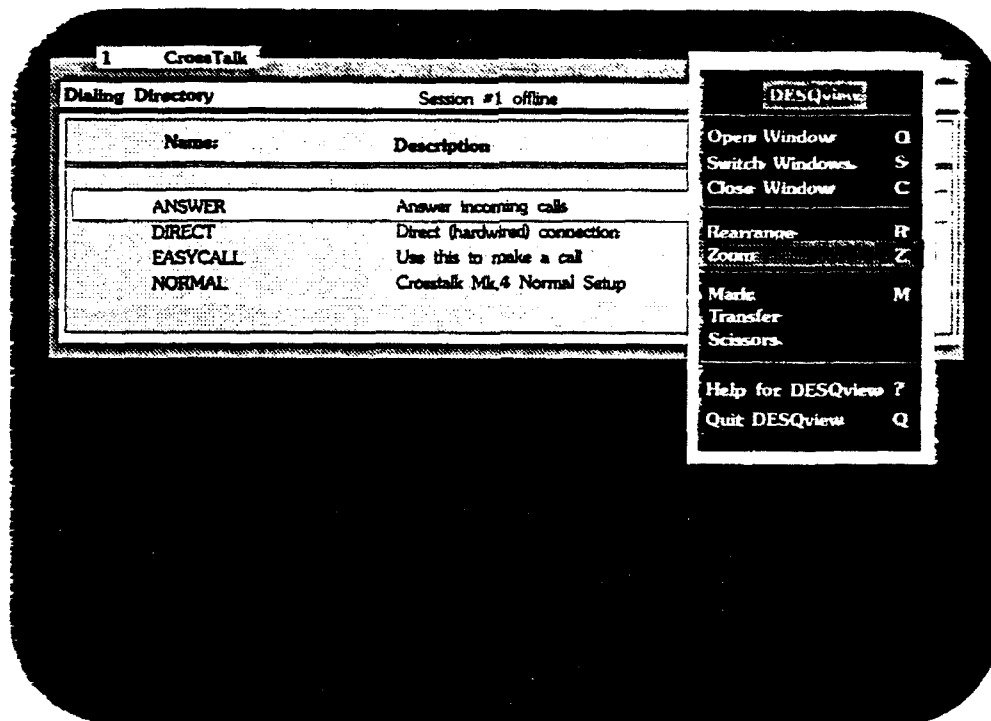


Figure 3.31. Crosstalk Dialing Directory Window and Main Menu.

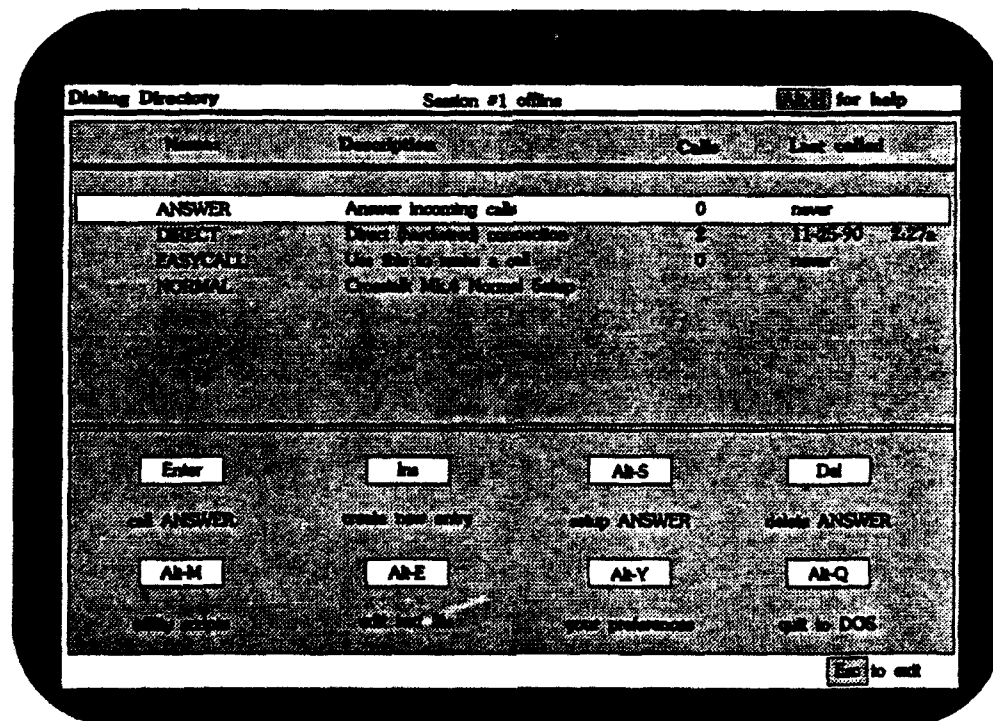


Figure 3.32. Expanded Crosstalk Dialing Directory Window.

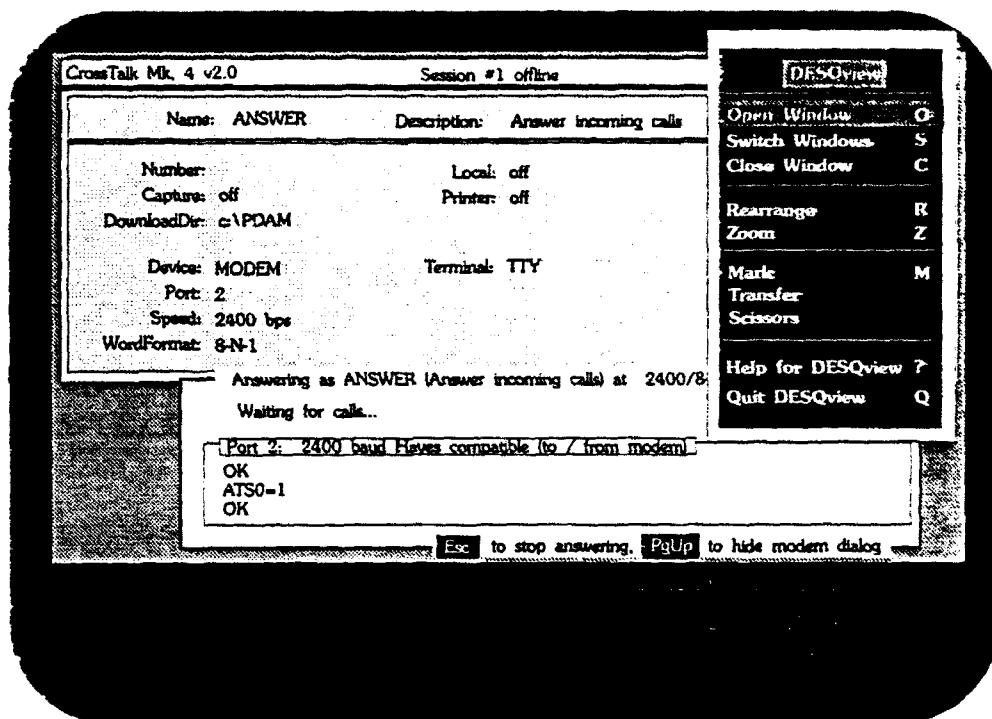


Figure 3.33. DESQview Main Menu in the Crosstalk Window.

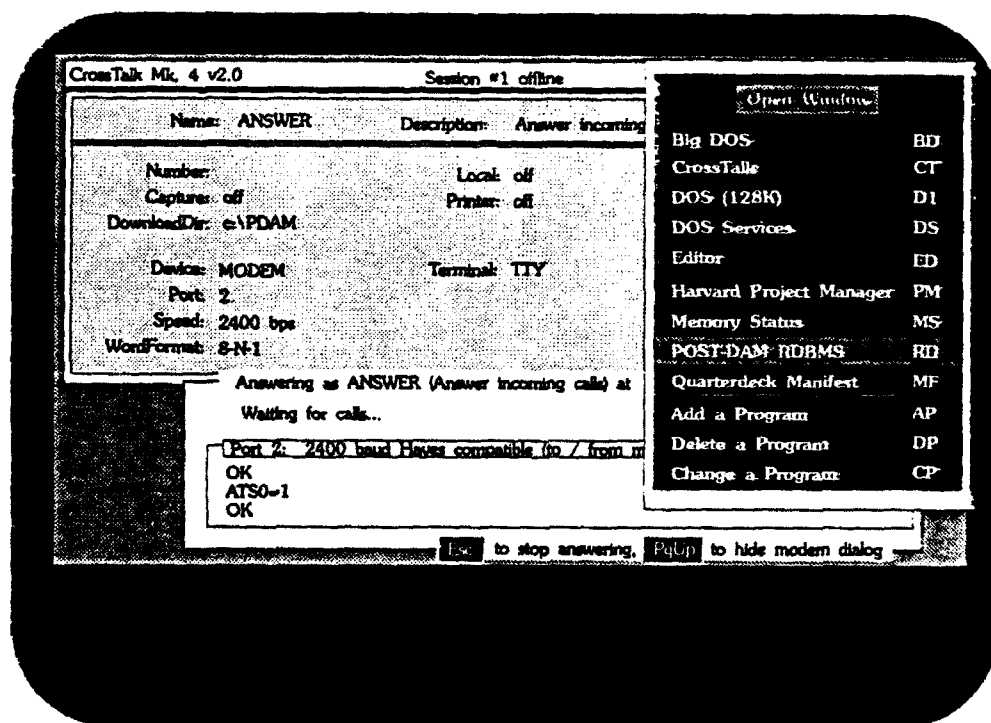


Figure 3.34. DESQview Open Window Menu in the Crosstalk Window.

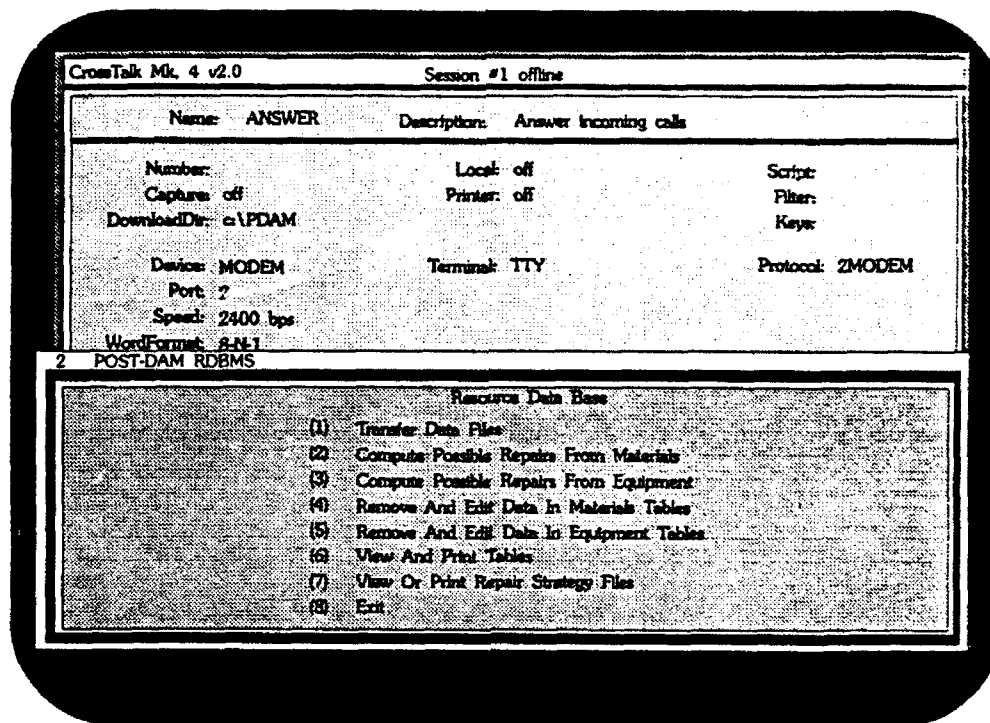


Figure 3.35. POST-DAM RDBMS Window in the Crosstalk Window.

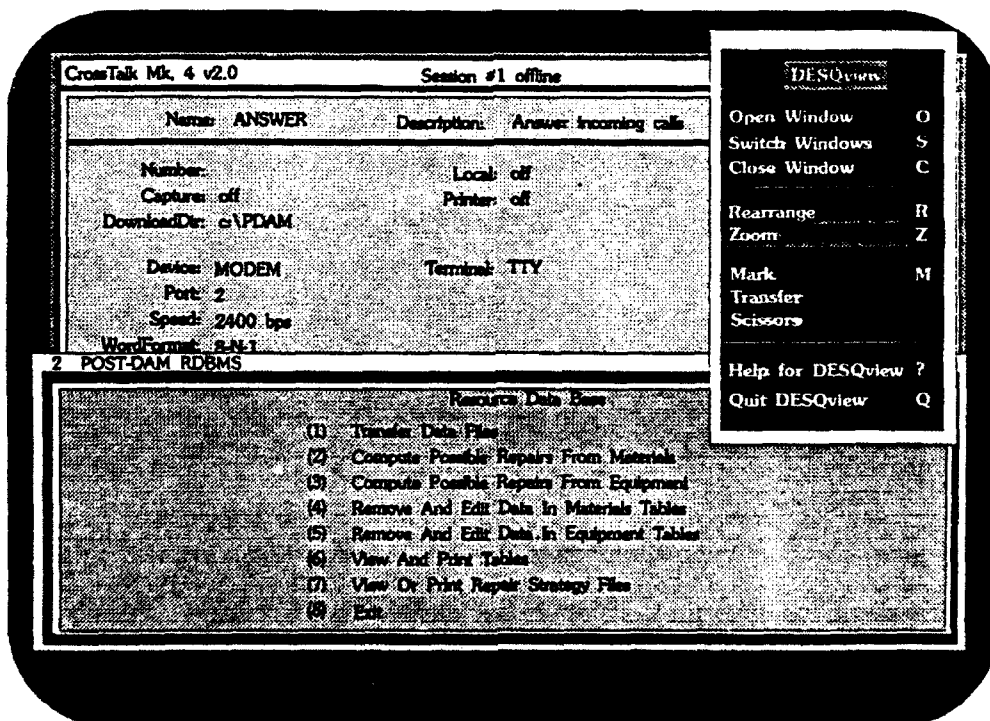


Figure 3.36. DESQview Main Menu and the POST-DAM RDBMS Window in the Crosstalk Window.

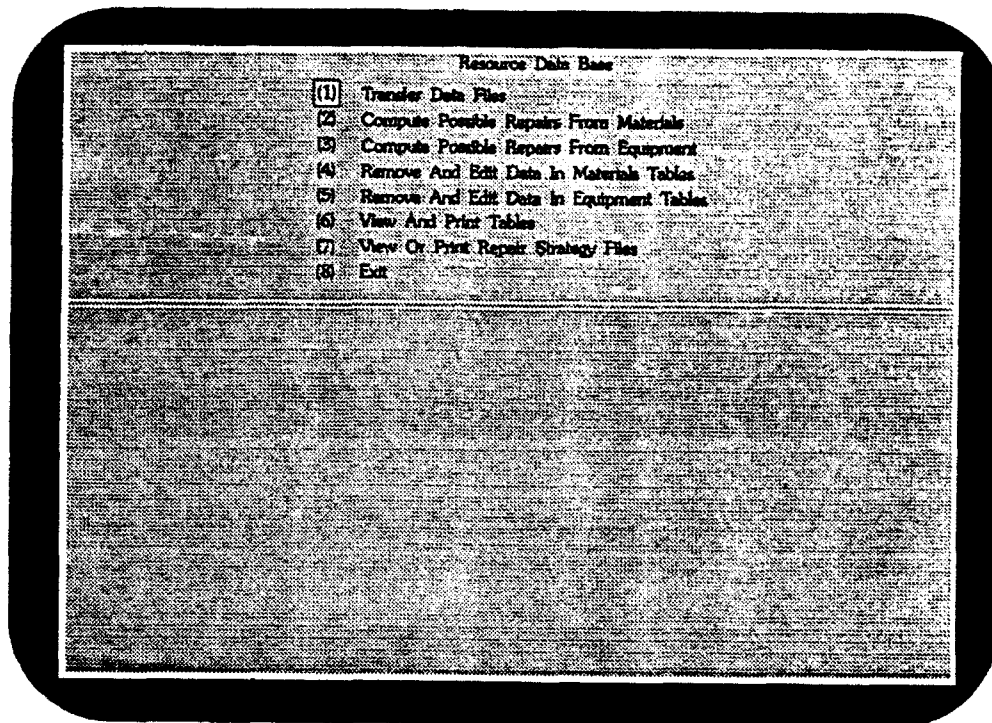


Figure 3.37. Expanded POST-DAM RDBMS Window

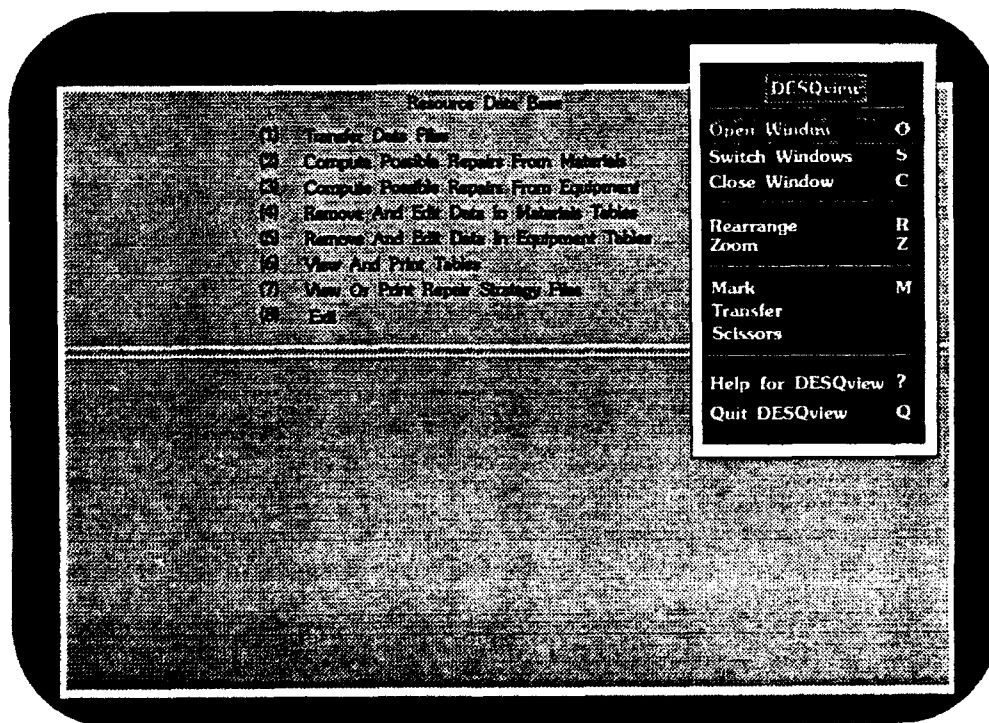


Figure 3.38. DESQview Main Menu in the POST-DAM RDBMS Window.

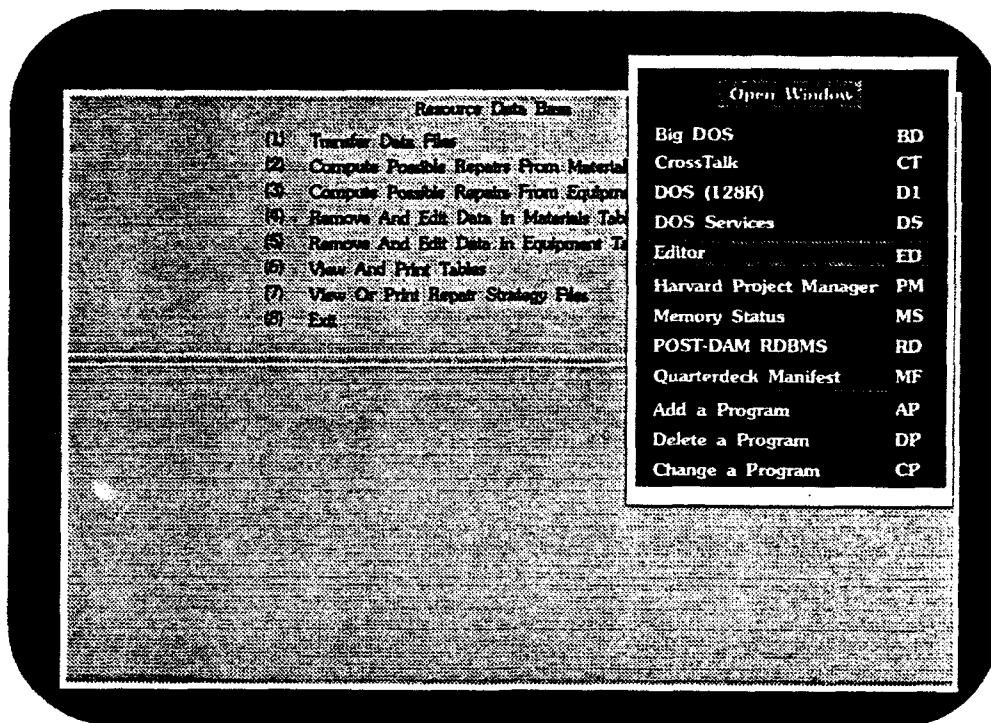


Figure 3.39. DESQview Open Window Menu in the POST-DAM RDBMS Window.

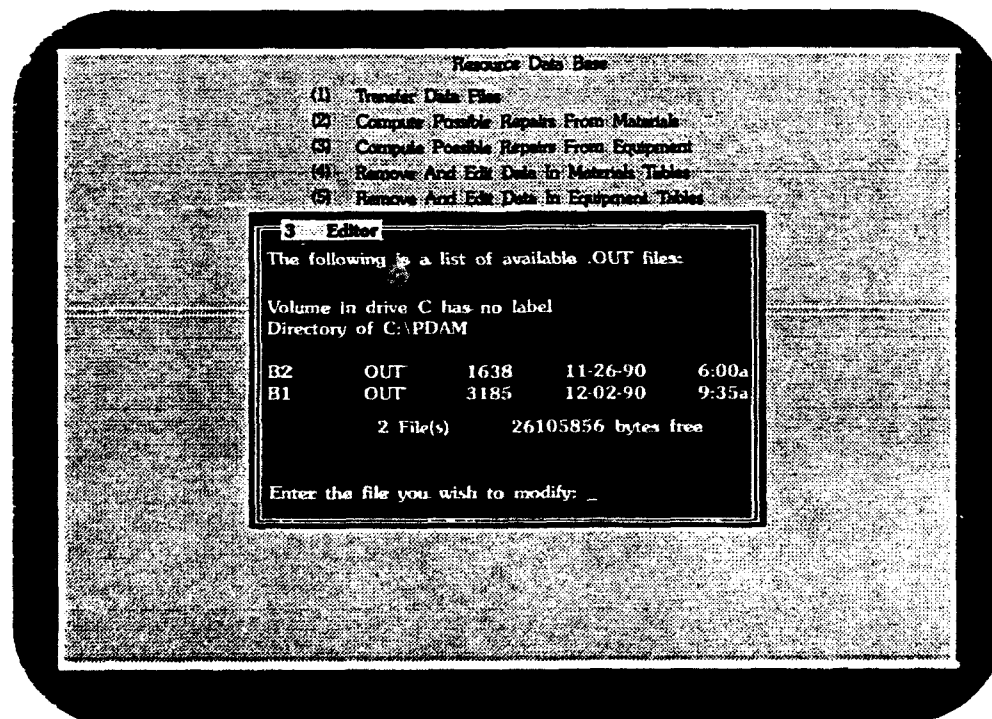


Figure 3.40. Editor Window in the POST-DAM RDBMS Window.

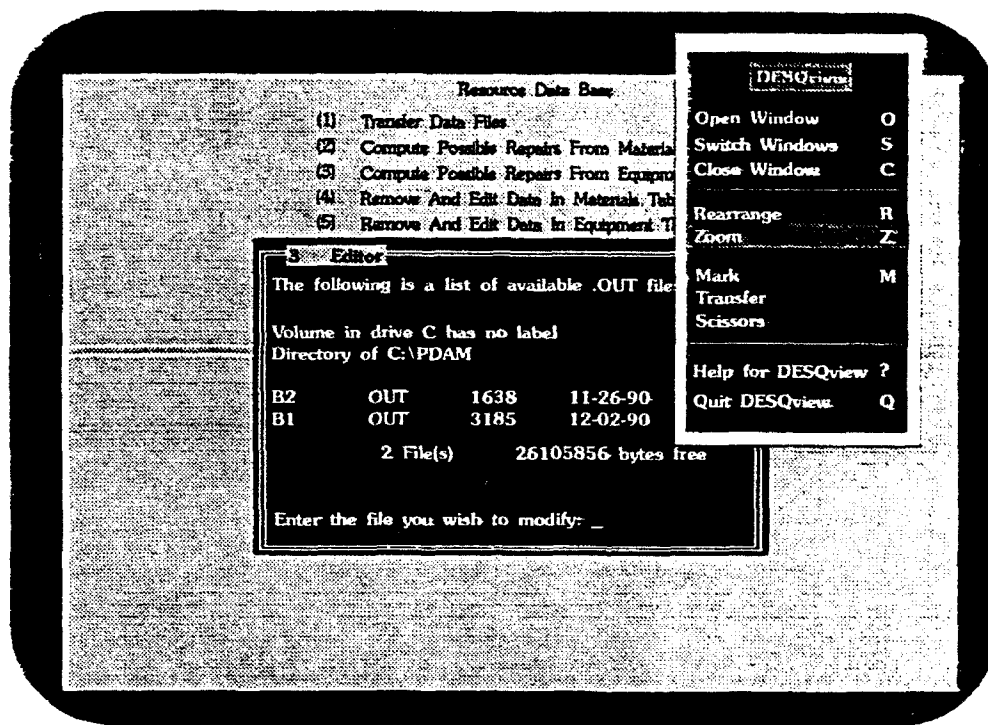


Figure 3.41. DESQview Main Menu and the Editor Window in the POST-DAM RDBMS Window.

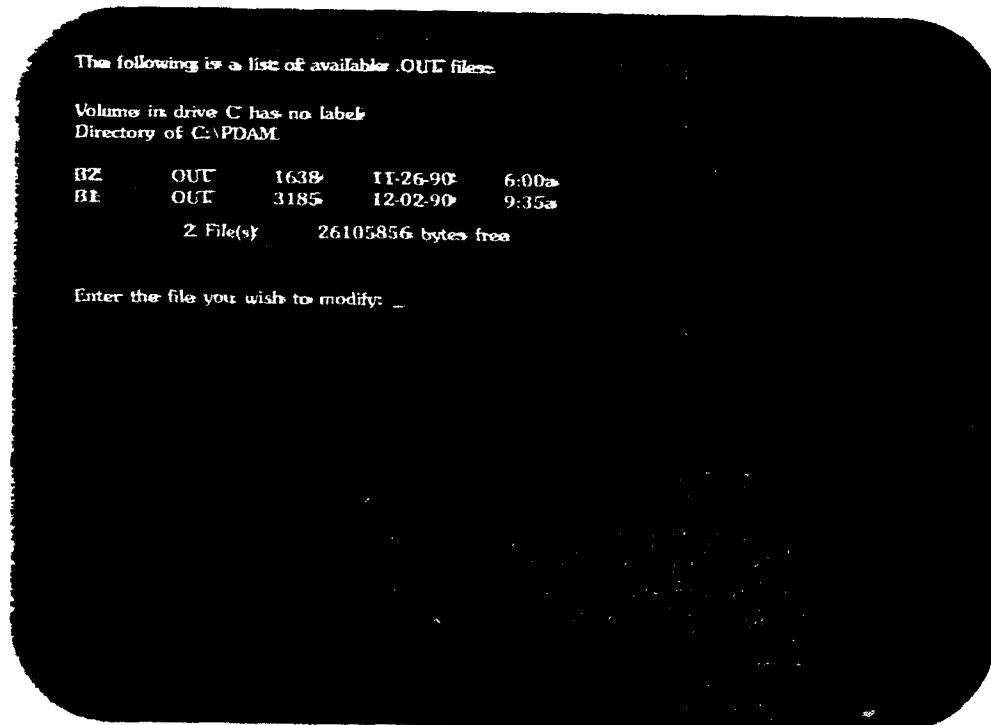


Figure 3.42. Expanded Editor Window.

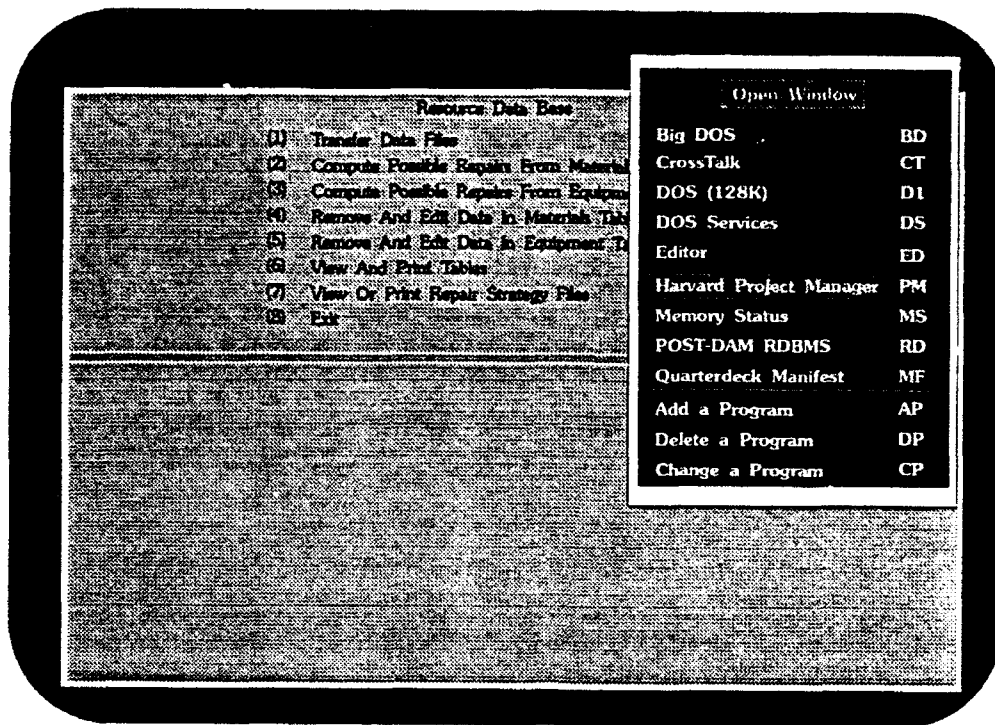


Figure 3.43. DESQview Open Window in the POST-DAM RDBMS Window.

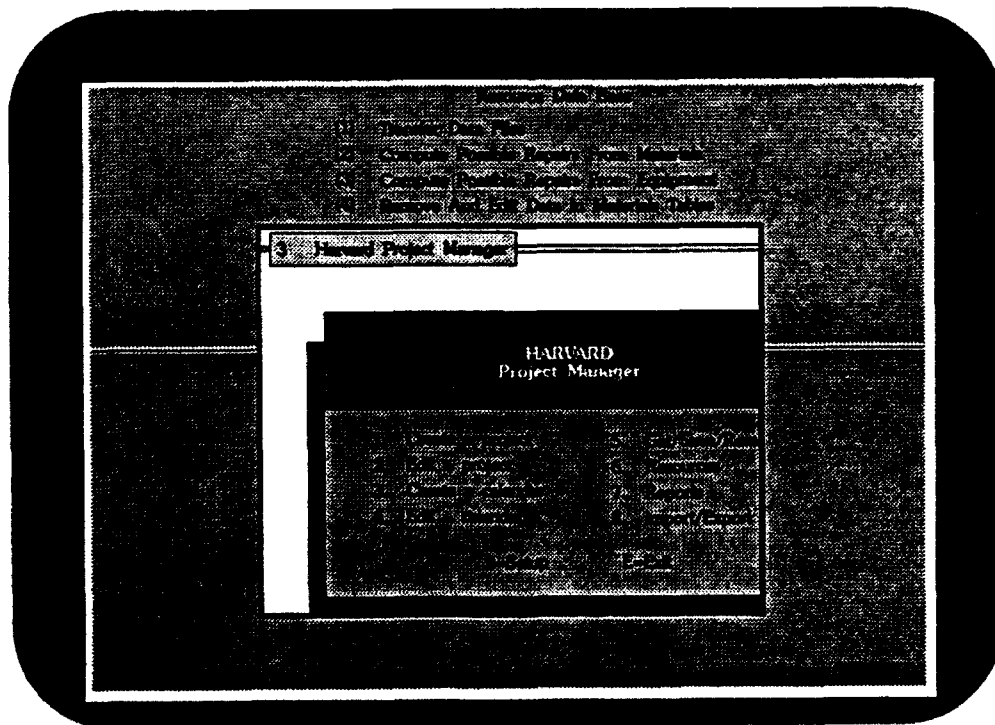


Figure 3.44. HPM Window in the POST-DAM RDBMS Window.

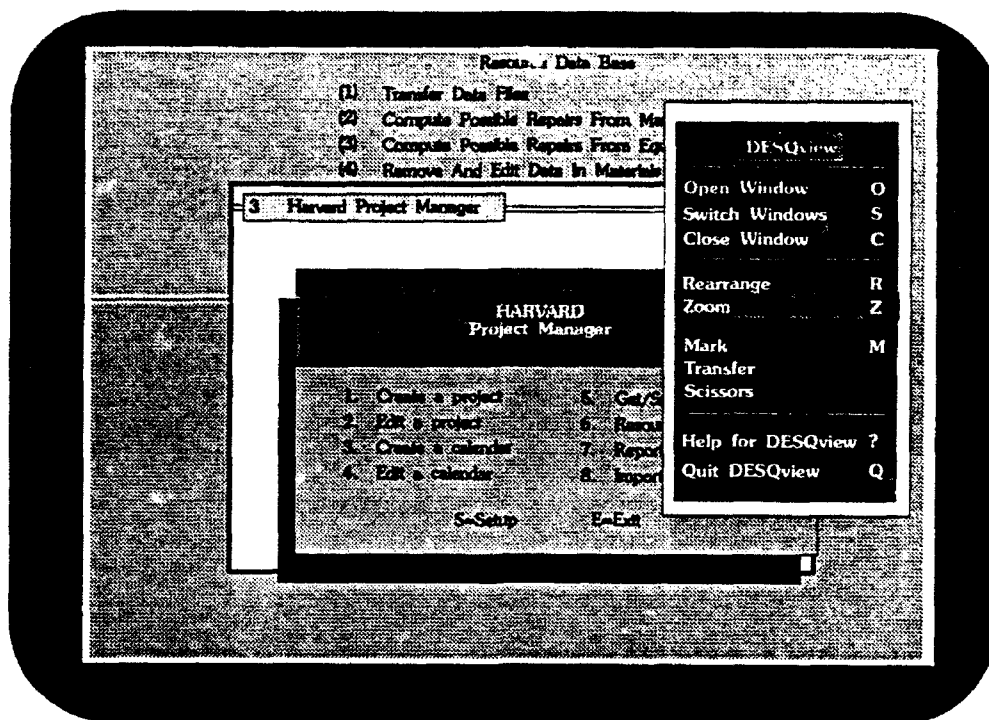


Figure 3.45. DESQview Main Menu and the HPM Window in the POST-DAM RDBMS Window.

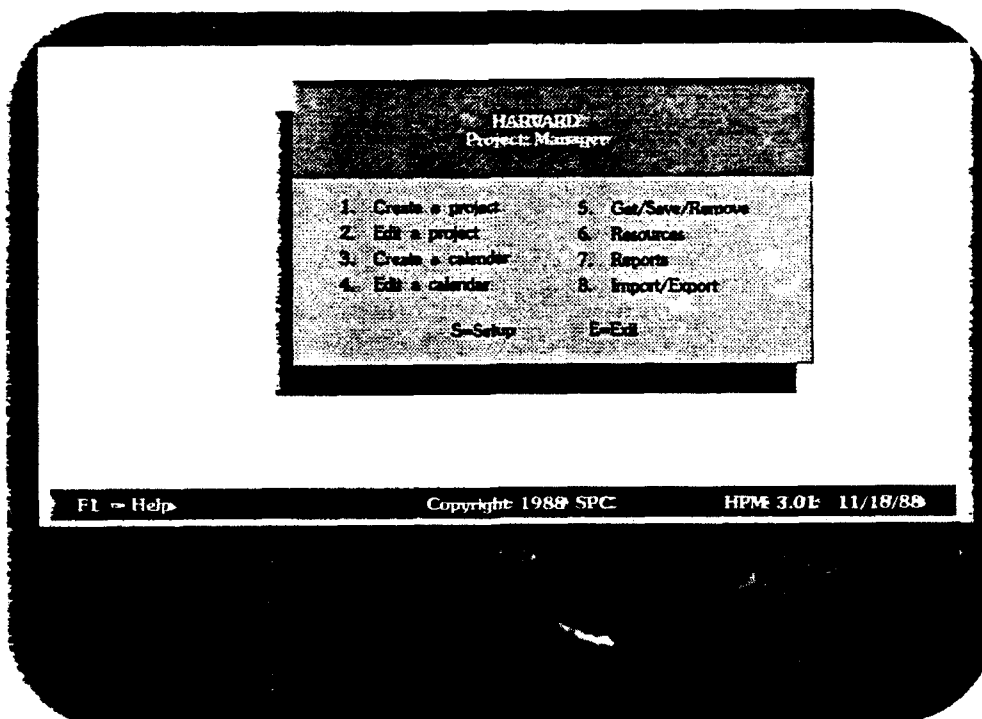


Figure 3.46. Expanded HPM Window.

DESQview Main Menu, as shown in Figure 3.47. The user then selects the Open Window Option, which displays the Open Window Menu, as shown in Figure 3.48. From here, the user selects the Editor Option, and the Editor prompt appears in the window, as shown in Figure 3.49. From the Editor Window, the user presses the [Alt] key, and the main menu appears, as shown in Figure 3.50. Here, the user selects the Zoom Option, which enlarges the screen, as shown in Figure 3.42. With the window enlarged, the user selects the repair strategy file to be edited, and edits the file as described in Section 3.3 of Document 2.2.6. After editing the file the user saves it, and is returned to the HPM window.

From the HPM window, the user returns to POST-DAM RDBMS to process the next mission-critical facility. The user presses the [Alt] key, which displays the DESQview Main Menu, as shown in Figure 3.51. Here, the user selects the Switch Windows Option, which displays the Switch Windows Menu, as shown in Figure 3.52. From here, the user selects POST-DAM RDBMS, and is returned to the POST-DAM RDBMS window, where the next mission-critical facility is processed, as described in Section 3.4 of Document 2.2.3.

To schedule the next set of repairs with HPM, the user presses the [Alt] key in the RDBMS window, which displays the DESQview Main Menu, as shown in Figure 3.53. Here, the user selects the Switch Windows Option, which displays the Switch Windows Menu, as shown in Figure 3.54. From here, the user selects HPM, and is returned to the HPM window, where the repairs are scheduled as described in Section 3.3 of Document 2.2.4. The user then continues to switch between POST-DAM RDBMS, HPM, and TED 1.1 using the Switch Windows Option, until all damaged facilities have been processed.

3.4 EXITING DESQVIEW 386

This section explains how to exit DESQview after all mission-critical facilities have been processed. Starting at the HPM window, the user saves the project, as described in Section 3.3 of Document 2.2.3. Next, the user presses the [Alt] key, which displays the DESQview Main Menu, as shown in Figure 3.55. Here, the user selects the Close Window Option, which displays the Close Window Menu, as shown in Figure 3.56. The user then selects Yes, and is returned to the POST-DAM RDBMS window. At the POST-DAM RDBMS window, the user presses the [Alt] key, which displays the DESQview Main Menu, as shown in Figure 3.57. Here, the user selects the Close Window Option, which displays the Close Window Menu, as shown in Figure 3.58. The user then selects Yes, and is returned to the Crosstalk window as shown in Figure 3.32.

At the Crosstalk Window, the user presses the [Alt] key, which displays the DESQview Main Menu, as shown in Figure 3.59. Here, the user selects the Close Window Option, which displays the Close Window Menu, as shown in Figure 3.60. The user then selects Yes, and the DESQview Main Menu appears, as shown in Figure 3.61. Here, the user selects the Quit DESQview Option, and the Quit DESQview Menu appears, as shown in Figure 3.62. The user selects Yes, and is returned to the DOS prompt of the root directory C:.

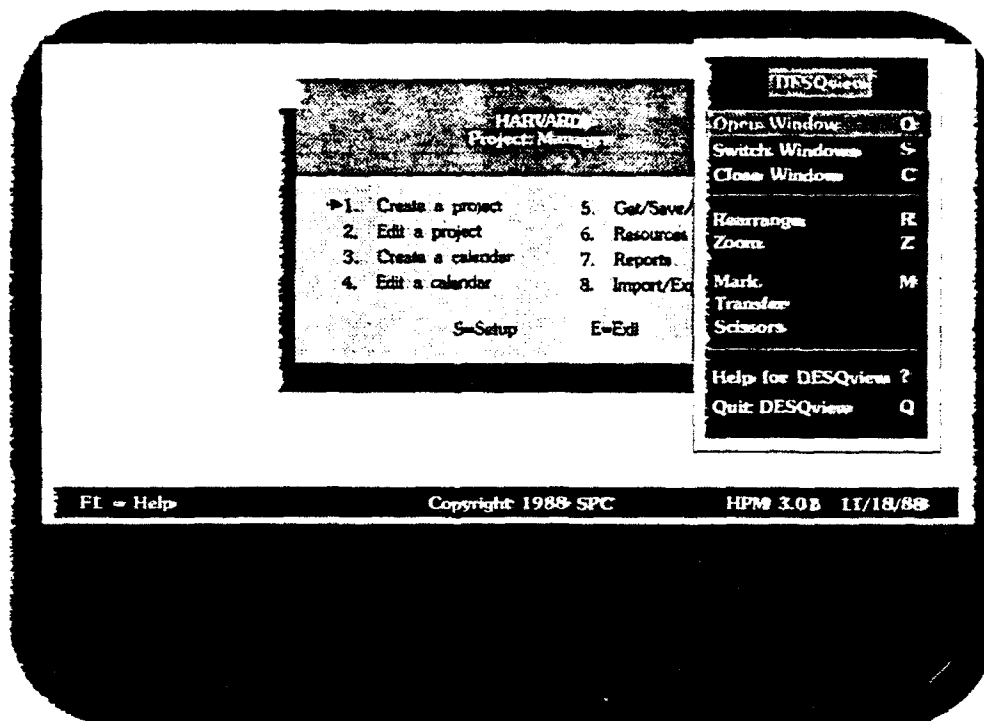


Figure 3.47. DESQview Main Menu in the POST-DAM RDBMS Window.

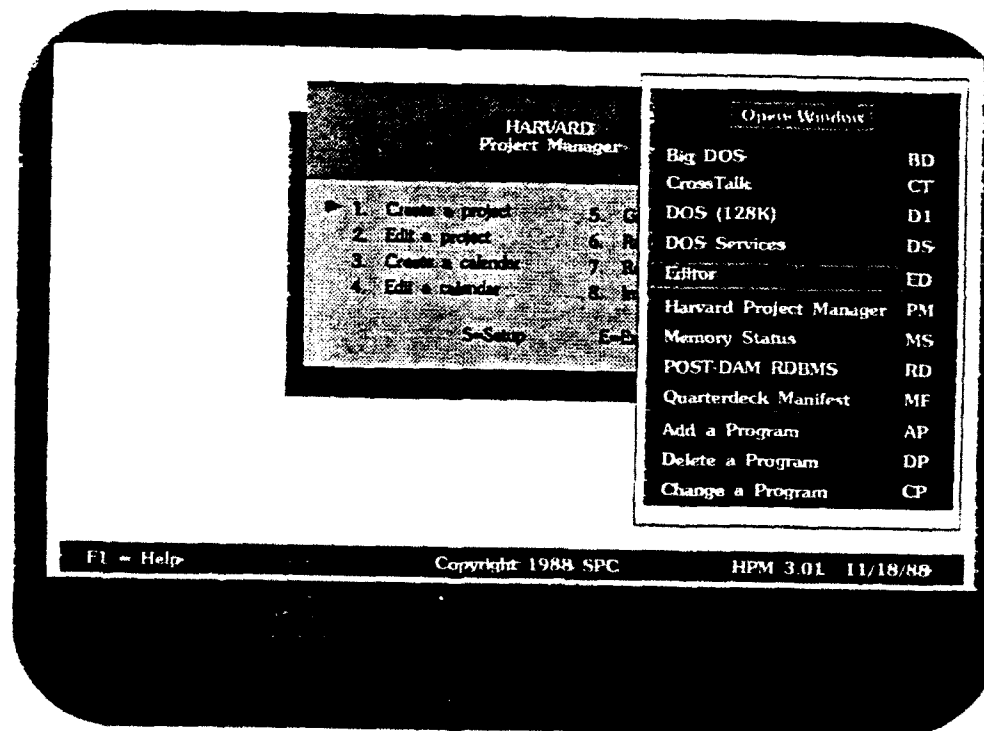


Figure 3.48. DESQview Open Window Menu in the HPM Window.

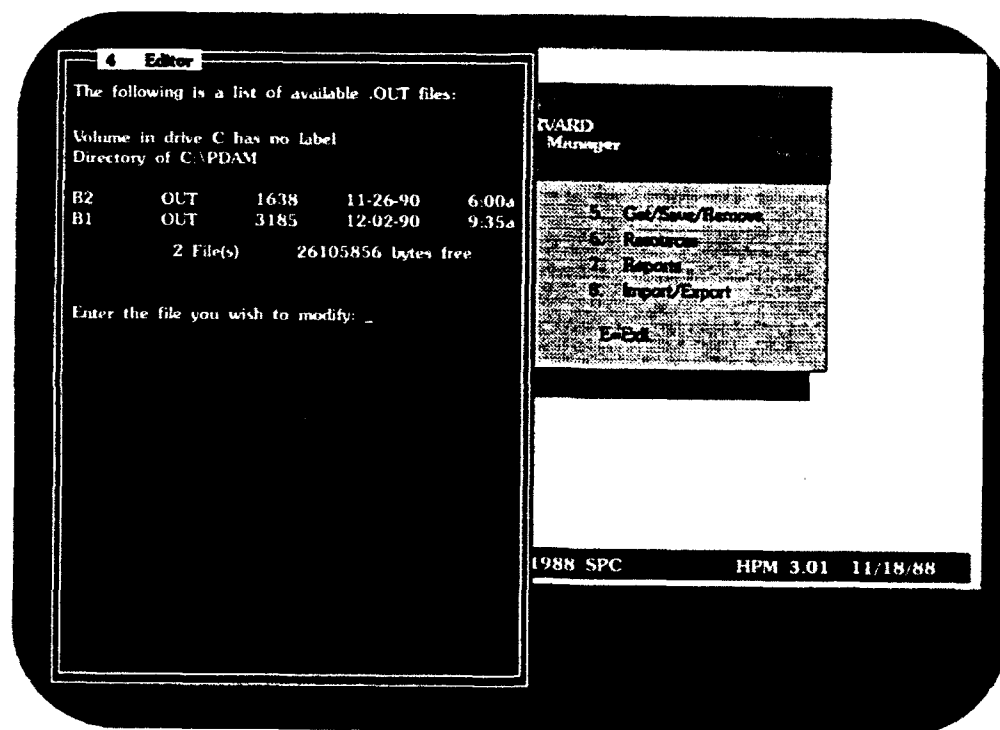


Figure 3.49. Editor Window in the HPM Window.

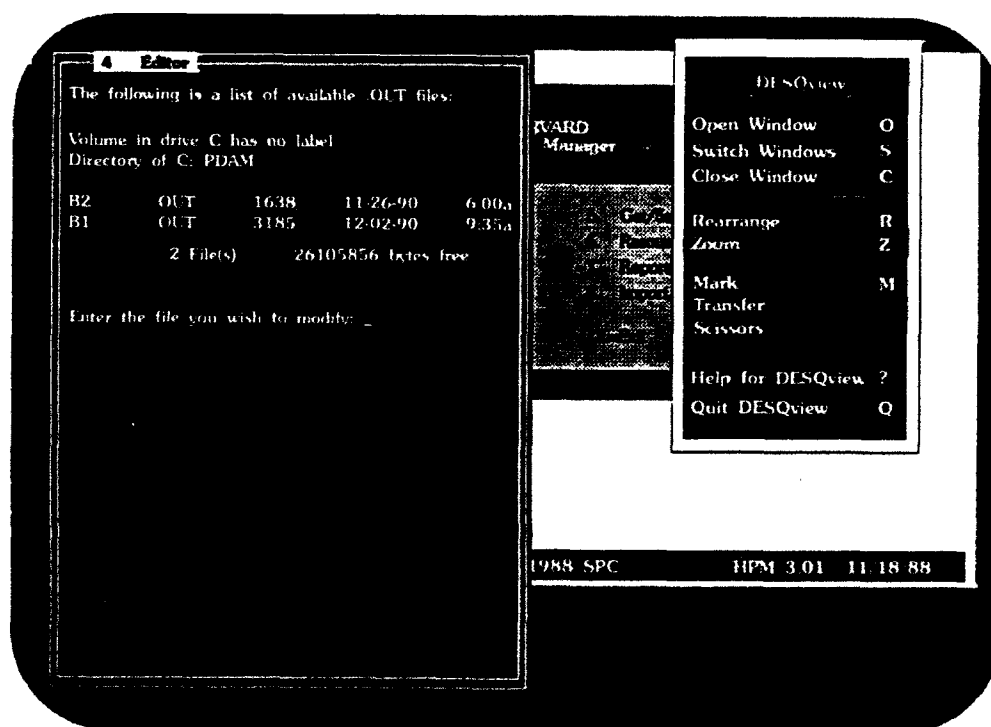


Figure 3.50. DESQview Main Menu and the Editor Window in the HPM Window.

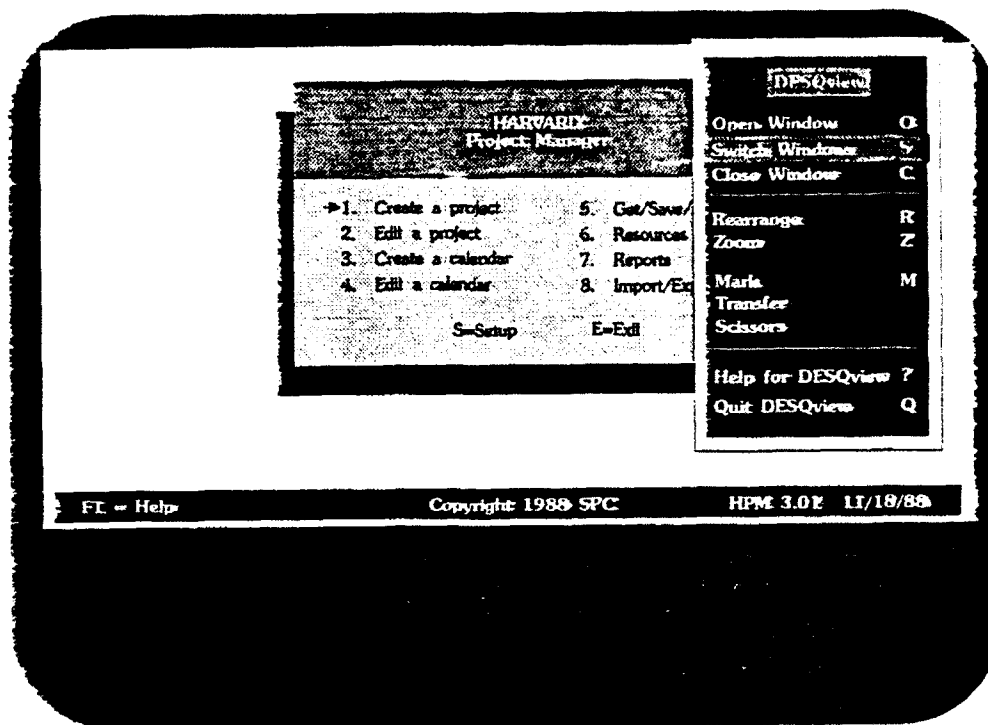


Figure 3.51. DESQview Main Menu in the HPM Window (Switch Windows Option)

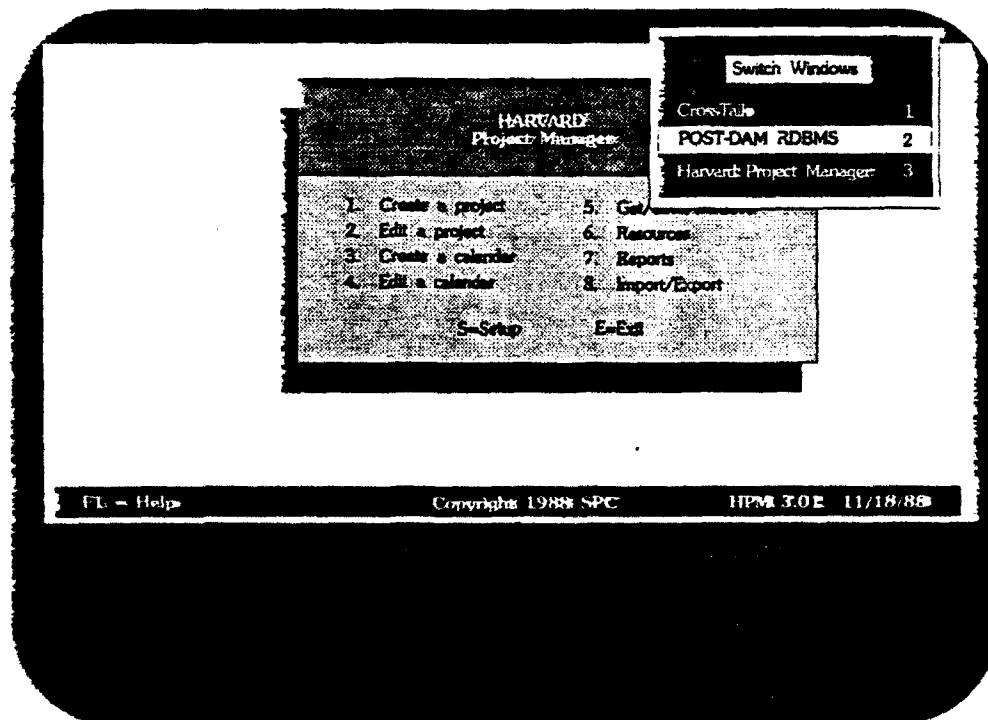


Figure 3.52. DESQview Switch Windows Menu in the HPM Window.

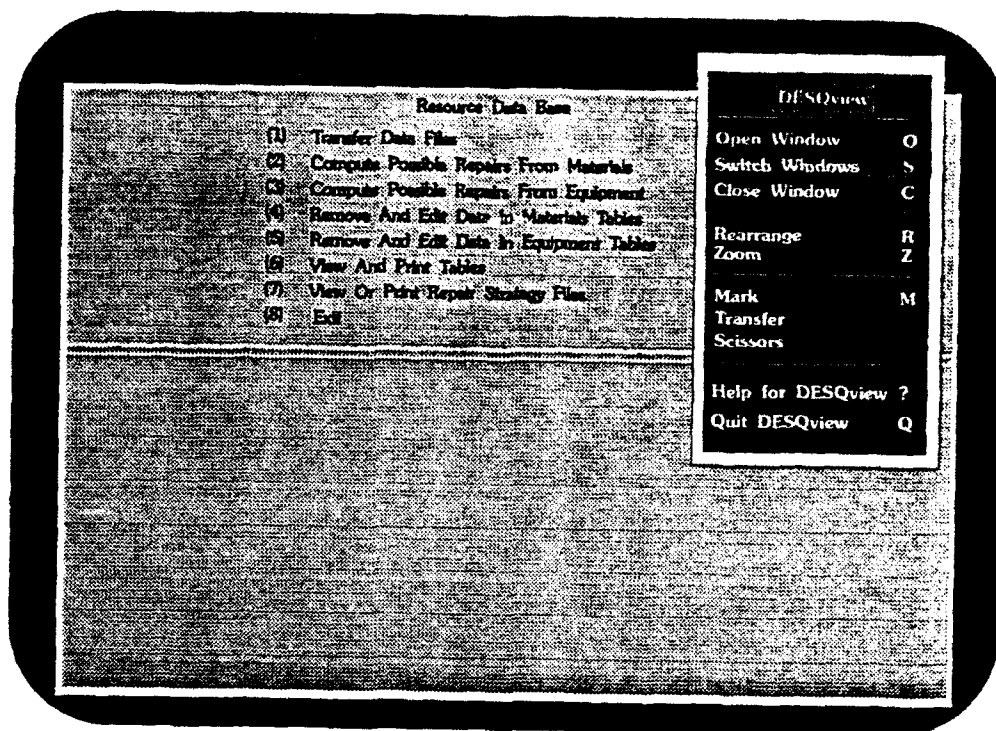


Figure 3.53. DESQview Main Menu in the POST-DAM RDBMS Window (Switch Windows Option)

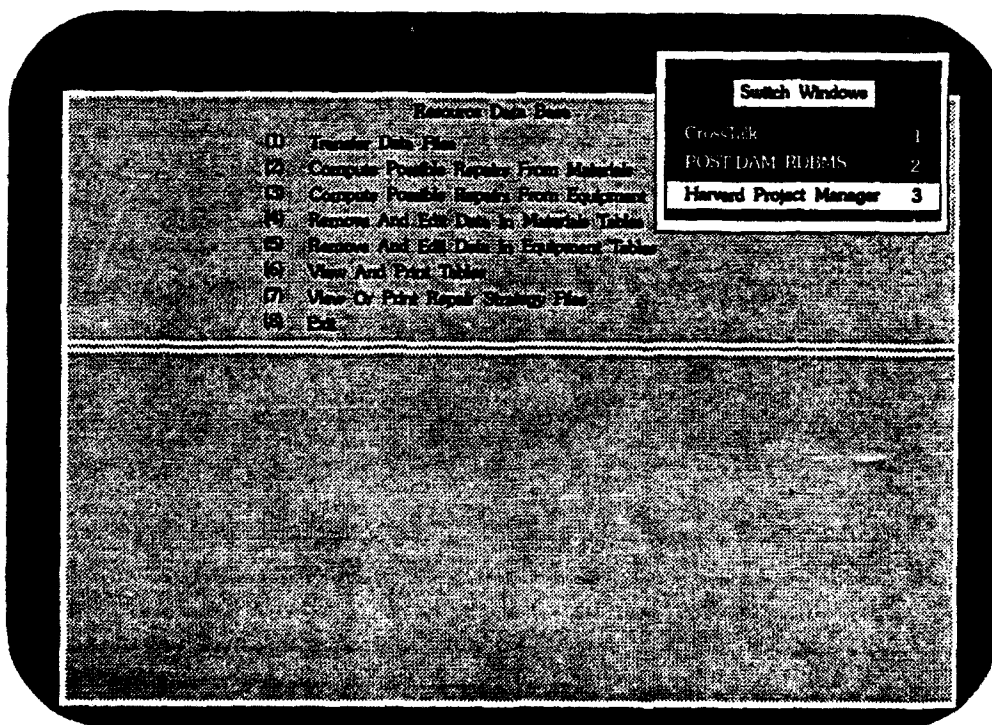


Figure 3.54. DESQview Switch Windows Menu in the POST-DAM RDBMS Window.

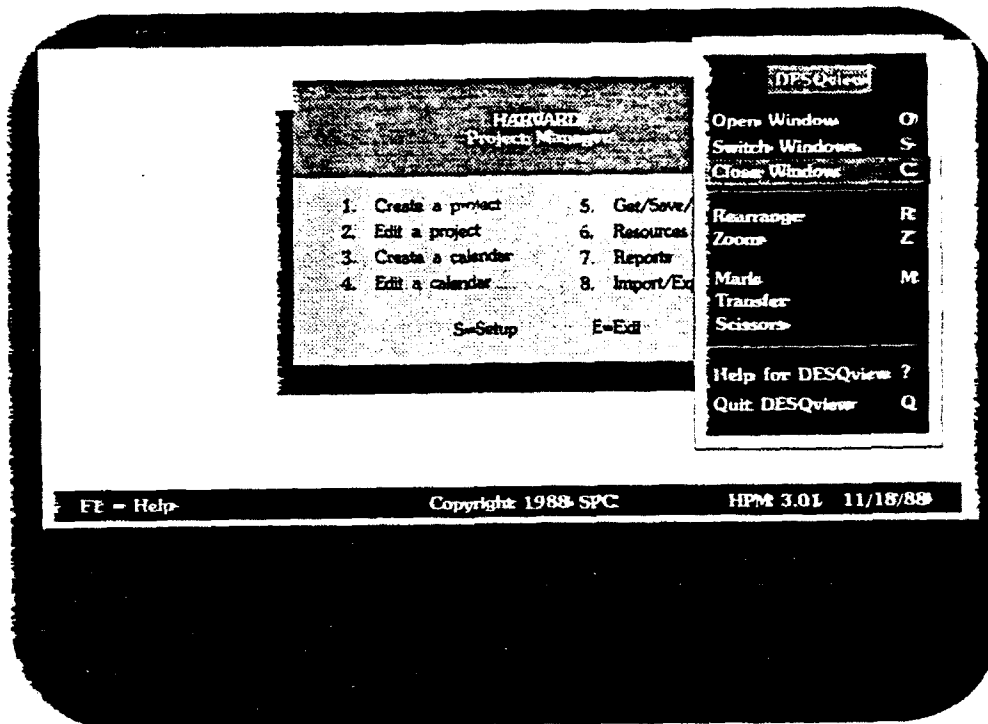


Figure 3.55. DESQview Main Menu in the HPM Window (Close Window Option)

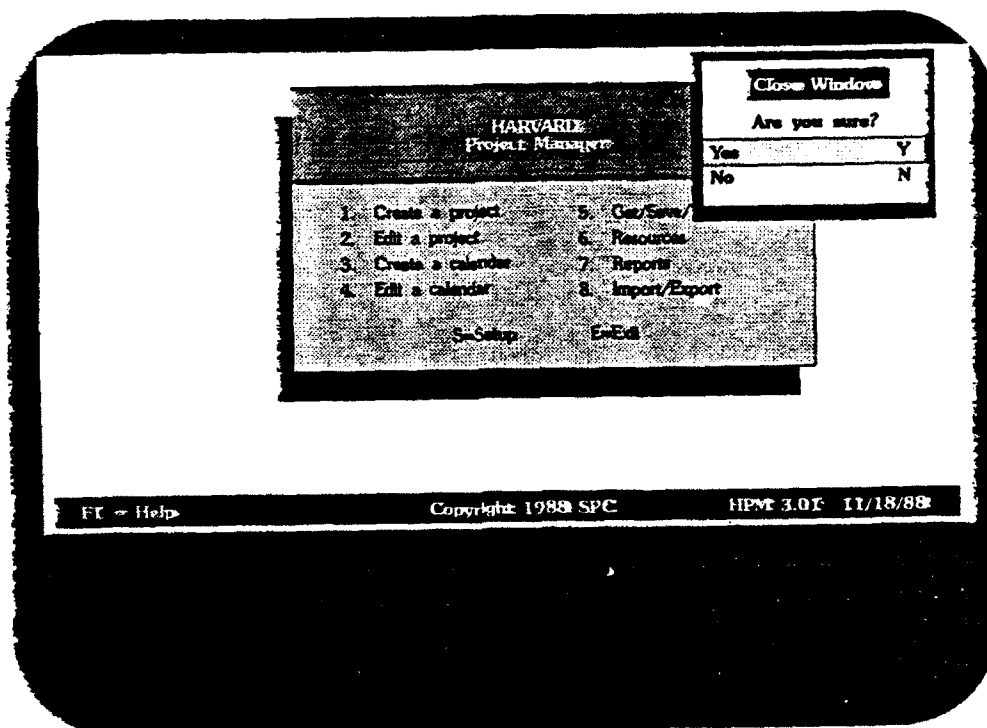


Figure 3.56. DESQview Close Window Menu in the HPM Window.

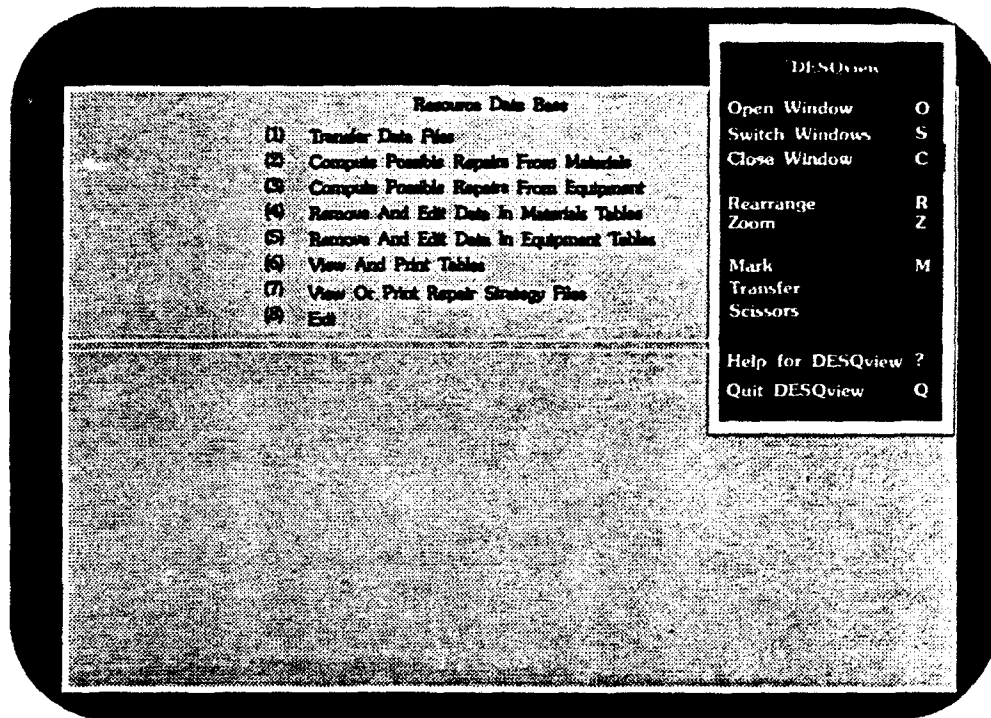


Figure 3.57. DESQview Main Menu in the POST-DAM RDBMS Window (Close Window Option)

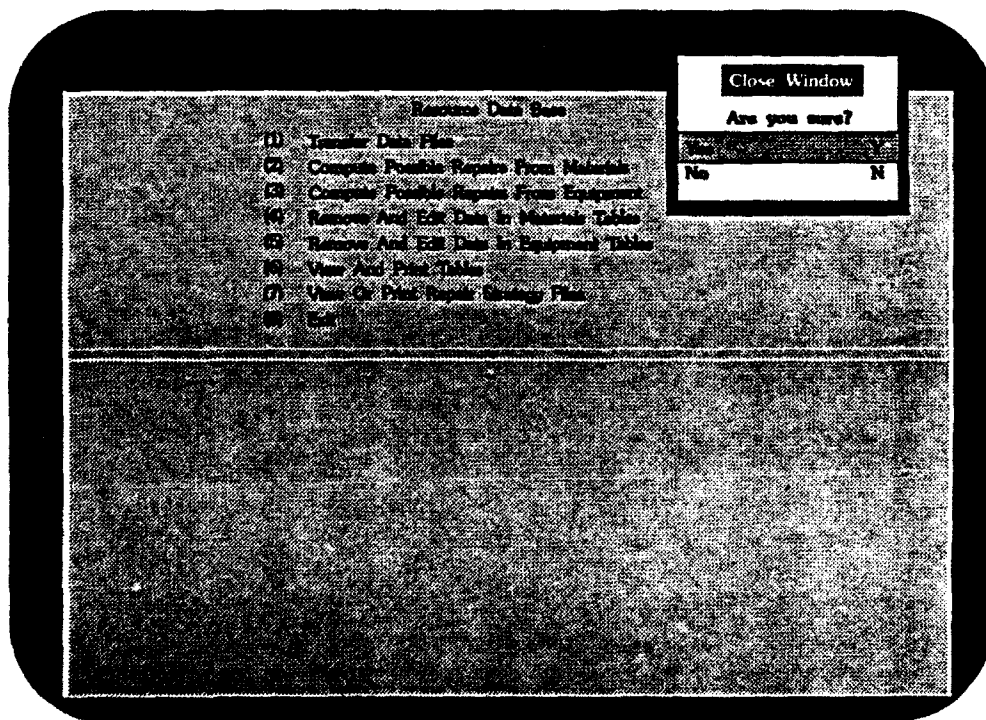


Figure 3.58. DESQview Close Window Menu in the POST-DAM RDBMS Window.

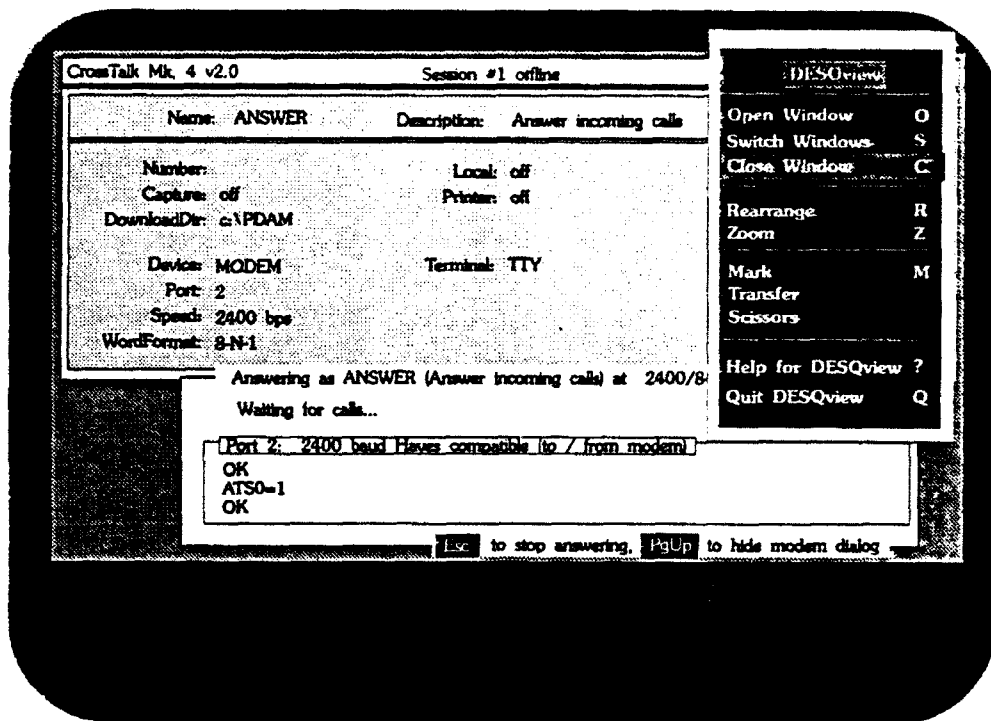


Figure 3.59. DESQview Main Menu in the Crosstalk Window (Close Window Option)

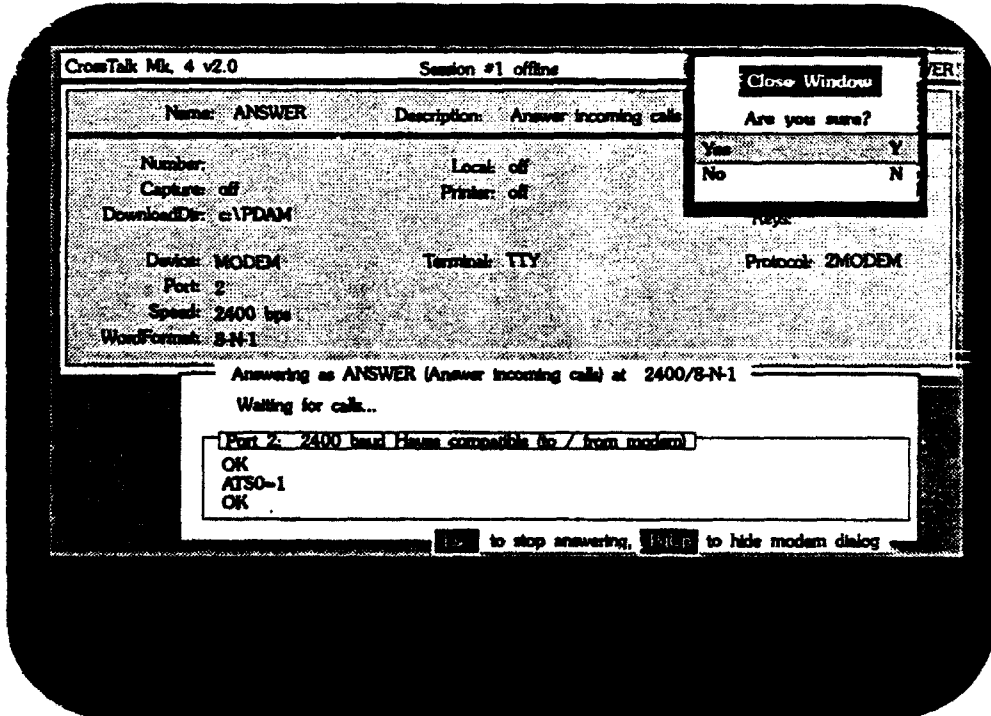


Figure 3.60. DESQview Close Window Menu in the Crosstalk Window.

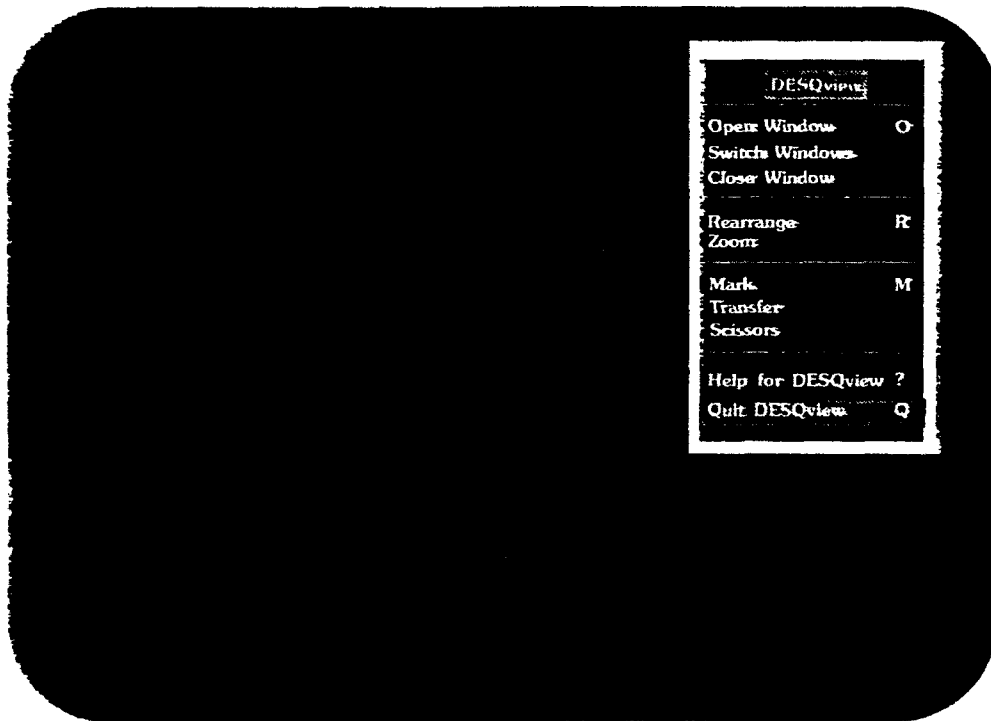


Figure 3.61. DESQview Main Menu (Quit DESQview Option).

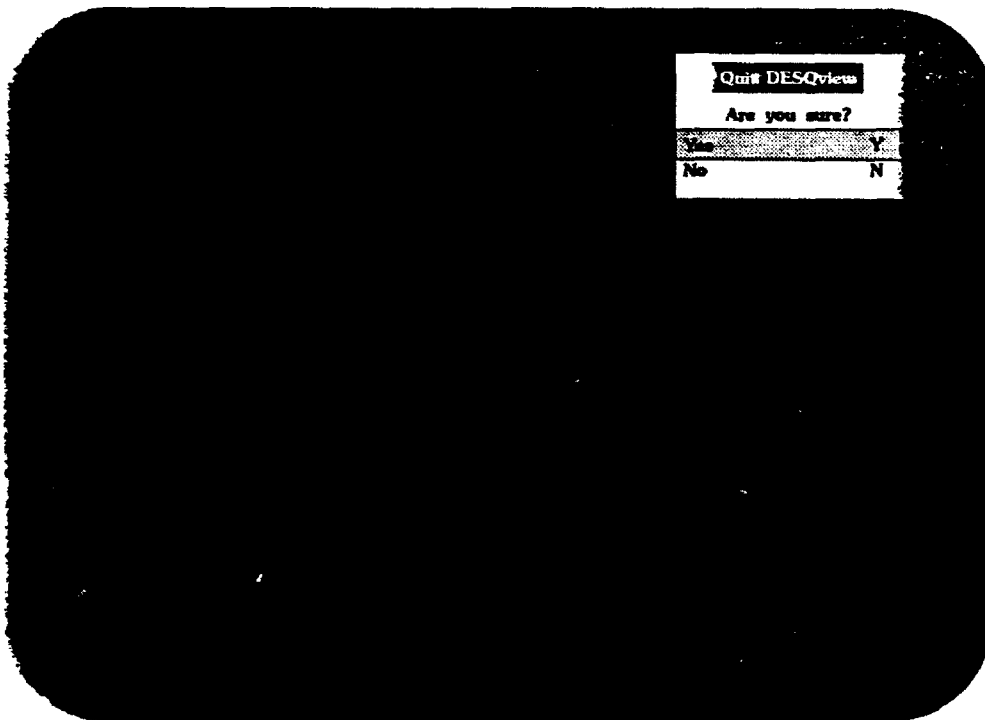


Figure 3.62. Quit DESQview Menu.